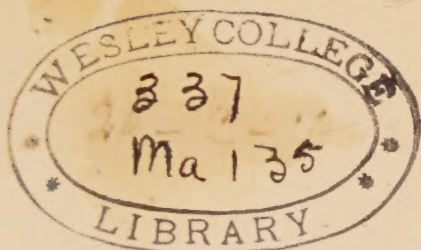


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FEDERAL AID

A Study of the American Subsidy System

BY

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TO
MY WIFE

PREFACE

THIS study of federal aid is based primarily on first-hand information. During the summer and fall of 1926 the author visited half the states of the Union, reaching every section except the Pacific Coast. The trip was productive of more than a thousand interviews—with federal, state and local officials, with representatives of farm and labor organizations and chambers of commerce, with newspaper editors, with typical farmers, merchants and bankers, with anyone and everyone who might be expected to know something of the practical operation of the subsidy system.

The investigation was made possible through the generosity of the Social Science Research Council, which awarded a research fellowship for "a comprehensive field study of the grants made by the federal government to the states."

The rapid growth of federal aid has forced it upon the attention of men in public life. Leaders of public opinion agree that it is one of the outstanding developments of federal administration, but their views are widely divergent as to the merits of the principles involved. Most of the discussions appearing in the public press and in current periodi-

cals are based upon idle gossip or irrelevant facts. Intensive and impartial studies of the subject have been sadly lacking.

It is hoped, therefore, that this volume will be of some value to all persons interested in public affairs. An attempt has been made to describe the entire federal aid system in some detail, and to evaluate it dispassionately and without prejudice. Every chapter devoted specifically to the operation of a subsidy law has been read and criticised by a representative of the federal bureau administering the statute. These criticisms have not always been accepted, and therefore the author wishes to make quite clear that he alone is responsible for all statements of fact and expressions of opinion.

A vast number of acknowledgments are due—to the Social Science Research Council, which not only financed the investigation but gave the author the greatest possible freedom of action; to Messrs. J. C. Wright, Charles R. Allen and John A. Kratz of the Federal Board for Vocational Education, Thomas H. MacDonald and H. S. Fairbank of the United States Bureau of Public Roads, J. G. Peters of the United States Forest Service, M. C. Wilson of the Agricultural Extension Service, Miss Grace Abbott of the Children's Bureau and Lt. Col. R. M. Cheseldine of the Militia Bureau, all of whom devoted hours of their time to examining and criticising portions of this volume, in addition to exposing themselves with-

out complaint to a broadside of more or less pertinent questions; to Professor James T. Young of the University of Pennsylvania, whose suggestions have proved invaluable; and to hundreds of state and local officials and private citizens in every section of the country without whose hearty co-operation this volume could not have been written.

AUSTIN F. MACDONALD.

Philadelphia, January 1, 1928.

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FEDERAL AID

CHAPTER I

THE AMERICAN SUBSIDY SYSTEM

THE right of the federal government to give to the states land from the federal domain and money from the federal treasury has never seriously been questioned. The precedents are numerous and of long standing. More than seven hundred thousand acres of national lands were turned over to the newly created state of Ohio by an act of 1802,¹ and since that time every state of the Union has benefited by Congressional generosity. In 1837 twenty millions of dollars, which had accumulated in the United States treasury, were distributed among the states.²

Some of these early grants were made unconditionally. In other cases, Congress merely stipulated that the funds should be used for schools or roads,

¹ 2 Stat. L. 173.

² Keith & Bagley, "The Nation and the Schools, pp. 55-61.

or for some other purpose. During recent years the conditions have become more numerous and more specific. But only within the last two decades has the federal government adopted the policy of purchasing with federal funds a considerable measure of supervision over numerous governmental activities not mentioned in the Constitution, and therefore presumably left in the hands of the states. Most of the money now appropriated by Congress for state use must be spent in a manner approved by the federal government. The construction of state highways must receive the sanction of federal engineers before the federal government will contribute toward their cost. The fire fighting methods and equipment of state foresters and their assistants must meet the approval of a federal bureau before Congressional appropriations become available for their salaries.

The manner in which federal funds are used to secure federal supervision over state activities is well illustrated by the Smith-Hughes Act of 1917, which establishes what has become a nation-wide system of vocational education. Under the provisions of this statute Congress offers to pay a portion of the salaries of teachers of vocational subjects in any state, provided certain conditions are met. Among these conditions are the appropriation by the state legislature of at least an equal amount for the same purpose, and approval by the Federal

Board for Vocational Education of the plans under which both state and federal funds are spent. Teachers must have at least minimum qualifications, state programs must at least provide for minimum necessary equipment and minimum hours and types of instruction—if federal money is to be made available. There is no compulsion. Each state is entirely free to ignore the federal offer. It may exercise its constitutional prerogative, and retain entire control of its educational system. But it becomes eligible for federal financial assistance only when it complies with federal requirements. The inducement has been sufficient to cause every state to accept federal funds and federal supervision.

The inflexible nature of the federal constitution has been in large measure responsible for the rapid development of this system of grants or subsidies from the federal treasury to the state governments. The past three-quarters of a century has been a period of vast commercial and industrial expansion, yet during that time only seven amendments to the Constitution have been adopted to meet changing conditions. The powers of Congress have expanded but little, while national problems have increased at an astounding rate. Industry has far transcended state lines, and has even crossed national boundaries. Giant corporations, with widely distributed plants and even more widely distributed stockholders, have in large measure taken the place of small factories.

This is the day of "big business." In the realm of commerce the development has been no less striking. Bars of steel knit together the Atlantic and Pacific coasts. Chicago is nearer New York today than was Philadelphia in colonial times. For most purposes state boundaries have ceased to exist. But in the field of government state boundaries still play a very significant part. State railway commissions, industrial commissions, public utility commissions, insurance commissions, banking commissions, health commissions and a multitude of others are applying their local regulations to nation-wide enterprises with devastating results. The line of demarcation between national and state powers is very little different today than at the close of the Civil War. Forty-eight states are attempting to solve national problems in forty-eight different ways, most of them equally unsatisfactory. State constitutions, state laws and state judicial decisions have produced a bewildering patchwork of policies and counter-policies concerning matters of national importance. The demands for at least a measure of federal control have been insistent, and Congress has found a way to meet these demands in the newly developed system of federal subsidies.

The states, for their part, have welcomed federal financial assistance at any price. In many states federal aid has helped to solve a most perplexing

problem. The voters have clamored loudly for better standards of service—more and better schools, more and better teachers, more and better roads. At the same time they have voiced no less insistently their demand for lower taxes. State legislators, fearing equally the wrath of the Better-What-Not organizations and the fury of the taxpayers, have cast about for new sources of revenue. One of the richest finds has been the federal treasury. Millions of federal dollars are available annually for state use. And so the states accept the offer of federal funds, accepting also perforce a measure of federal supervision over local activities.

The growth of the federal subsidy system has been almost phenomenal. In 1912 the total of the payments from the federal treasury to the states was approximately eight million dollars. By 1925 it had risen to one hundred and forty-seven millions, an increase of more than seventeen hundred per cent. Federal aid in 1921 amounted to two and one-half times the subsidies of the preceding year, and since 1921 the growth has continued at a remarkable rate. Total federal aid payments for the fiscal year ending June 30th, 1927, were \$136,659,786.47. The chart below illustrates graphically the increase in federal subsidies to the states:

Federal Aid Payments to the States, 1912-27

1912	—————	\$8,149,478.21
1913	—————	\$7,752,961.01
1914	—————	\$10,533,660.78
1915	—————	\$10,352,211.79
1916	—————	\$12,645,489.02
1917	—————	\$15,625,056.55
1918	—————	\$22,805,680.12
1919	—————	\$22,104,992.13
1920	—————	\$35,923,706.48
1921	—————	\$90,437,848.13
1922	—————	\$128,366,639.95
1923	—————	\$111,727,193.28
1924	—————	\$128,067,312.27
1925	—————	\$147,351,393.22
1926	—————	\$141,614,101.05
1927	—————	\$136,659,786.47

Nearly sixty per cent of all federal aid is for highway construction. Twenty-three per cent is for arming and equipping the National Guard. The following table shows the purposes for which federal subsidies were granted to the states in 1927:

Federal Aid Payments to the States for the Fiscal Year 1927

Support of agricultural colleges.....	\$2,400,000.00
Support of experiment stations.....	2,400,000.00
Co-operative agricultural extension work.....	*6,875,727.55
Vocational education	7,184,901.51
Vocational rehabilitation	880,263.00
Highways	81,371,013.03
National Guard	31,363,935.31
Forest fire prevention	654,101.57
Distribution of nursery stock.....	71,194.61
Forest extension work.....	46,241.64
Maternity and infant hygiene.....	899,824.71
State fund under oil leasing act.....	2,498,689.58
State fund from sale of public lands.....	*13,893.96
Total	\$136,659,786.47

*1926.

The above table shows only the grants of money from the federal treasury. In addition, thousands of acres of federal lands were transferred to the states during 1927. Since the close of the World War two hundred and twenty-four million dollars' worth of surplus war material has been delivered to the state highway departments for road building purposes.

All the more recent federal aid laws passed by Congress have certain features in common. So closely do they follow the same pattern that one is justified in speaking of an American subsidy system. The outstanding characteristic, of course, is the granting of federal money to the states. The usual

basis of apportionment is population—urban, rural or total, though population is but one of three factors in determining the distribution of the highway subsidy, while one federal aid statute entirely abandons population as a basis of apportionment. Three conditions must be met by every state receiving federal funds. First, the legislature must accept the federal act, and must make provision for a state agency with authority and funds adequate to carry on the work. Second, this state agency is required to formulate a detailed plan of its activities, which must meet federal approval. In most cases the federal supervisory officials have set up minimum standards. Vocational teachers must have a certain minimum of training and experience; highway grades must not exceed a certain per cent. But within these broad and highly flexible limits the state agency is given a free hand. It originates the state plan, and is responsible for its execution. Federal supervision is frequently little more than nominal. The third condition imposed by the federal government in all its recent subsidy legislation is the matching of federal funds. Each state is required to spend a dollar of its own money for every dollar it receives from the federal treasury. Federal and state appropriations must both be expended for the same purpose, and their use subjected to federal scrutiny. In this manner the federal government secures the right to supervise twice the amount of the federal

grant. Actually, it secures a measure of supervision over far more than that. Federal vocational education funds and the state funds that match them may only be used for the payment of teachers' salaries; but the necessary plant and equipment, furnished and maintained at state expense, must meet with federal approval. Federal highway appropriations and their state equivalent may be devoted only to road building; but the federal government insists upon proper highway maintenance at state expense.

This policy of securing a maximum of federal supervision with a minimum of federal funds has in no wise discouraged the states from accepting their allotments of federal money. On the contrary, the states are almost unanimous in their support of the several federal programs. Seven have failed to accept the civilian rehabilitation law, three have ignored the federal child hygiene offer, and one has no National Guard. Naturally, a number of the states having no forests and no forest fire problems do not co-operate with the federal government for forest fire prevention. With these few exceptions, every state has accepted every subsidy offered by Congress. Such hearty state co-operation would scarcely have been possible without the inducement of federal funds.

Far more significant than the number of states accepting federal aid is the record of accomplishments under the various subsidy laws. Agricultural

extension work, for example, has introduced new crops and new livestock enterprises into every section of the country, has aided materially in the fight against plant and livestock diseases, has helped to conserve the fertility of the soil, has aided farmers in solving their marketing problems, and has improved the practices followed on millions of American farms. Under the Civilian Rehabilitation Act thousands of dependent cripples have been transformed into independent wage earners. Equally impressive is the history of achievement under the other federal aid acts.

At the same time, state standards of administration have been materially raised. There is general agreement among the state officials that in most states the work has been put on a higher plane because of federal supervision. "I believe federal requirements have changed almost completely the standards of highway engineering in most of the states of the Union," declared one state highway engineer. "Federal supervision has aided materially in raising our standards," said the director of vocational education of an Eastern state. Recently two hundred and sixty-four state officials administering the federal subsidy laws in every section of the country were asked if federal requirements had bettered their standards of work. One hundred and eighty-one replied in the affirmative. As one state forester said: "Without federal example and supervision I

fear we should be much less effective than we are." Most of the negative answers were from the wealthy, progressive states least in need of federal leadership and federal funds.

State officials frequently use the fact of federal supervision as a means of evading importunate local politicians. The suggestion is sometimes made to a chief highway engineer by means of divers subterranean channels that the choice of an impractical route for a new road would be pleasing to the county commissioners. Occasionally the state director of vocational education is given to understand that the employment of some incompetent would not be unacceptable to the local boss. "I can't do as you ask," replies the state official, be he engineer or educator. And when pressed for a reason he is very apt to say: "The federal government won't let me." Perhaps he should add explicitly that he is in hearty accord with the federal regulations. But Washington is a long distance away, and the local politicians are very close at hand. The temptation to shift the responsibility is great. Federal bureau chiefs can withstand local pressure that would force the dismissal of state officials. Unfortunately, every such instance heightens the impression of federal domination. Men whose cherished schemes are thwarted because "the federal government won't let them" are apt to become bitter opponents of federal aid.

In fact, most of the opposition to the American

subsidy system comes from those who understand it least. In the South it is persistently rumored that federal supervision of vocational education means the abolition of separate schools for white and colored children. In other sections of the country it is said that federal aid for child hygiene work means the lessening of parental authority. The plain fact that in every instance the state authorities formulate and carry out their own plans, subject to the approval of the federal government, is generally ignored.

Because it unites so skillfully the principles of local initiative and central supervision, federal aid is an important phase of American administration. The old line of division between state and national powers is manifestly unsuited to present-day conditions. Local authorities find themselves powerless to cope with problems that have become national in character. The natural corollary of supine state administration is greater federal authority. But men are loath to sacrifice the autonomy of the states. They know the dangers of excessive centralization. They realize that central control of government activities means the crushing of all local initiative. The real need is for some device that will combine state control with national leadership. Federal aid meets that need.

CHAPTER II

THE EVOLUTION OF FEDERAL AID

a. LAND GRANTS

IN 1785, when Congress was still meeting under the Articles of Confederation, it decreed that a portion of the public domain in what was then the Northwest Territory should be set aside for the maintenance of public schools.¹ Seventeen years later, when Ohio was admitted into the Union, its enabling act provided that "the section number sixteen,² in every township, and where such section has been sold, granted, or disposed of, other lands equivalent thereto, and most contiguous to the same, shall be granted to the inhabitants of each township, for the use of schools."³

And so the precedent was definitely established. Only three of the many states wedded to the Union since 1802 have failed to receive from the federal government a dower of land for their public schools. From 1848 until 1894 it was the uniform policy to grant two sections in each township to newly ad-

¹ Journals of Congress, v. 10, p. 121.

² The lots were each a mile square, constituting one thirty-sixth of a township.

³ 2 Stat. L. 173.

mitted states; since 1894 four sections have been given.⁴ Federal land grants have not been made solely for the support of common schools, however. A few days after the passage of the Northwest Ordinance of 1787 Congress provided "that land not amounting to more than two townships be given perpetually for the purpose of an university."⁵ It soon became customary to give to each state, upon its admission into the Union, at least two townships for a university, and this policy was regularly followed until 1889. More than half a million acres of public domain have been transferred to the states to be used as seats of government, or to defray the cost of erecting public buildings.

Fifteen states have been given large areas of swamp land, on condition that the proceeds be used, as far as necessary, for its reclamation. Some have been given title to the salt lands within their borders.⁶ During the early years of the nineteenth century Congress donated nearly five million acres of public domain to aid the states in building canals; and after the Civil War, to stimulate railroad construction, it transferred to the states about forty million acres of federal land. The railroads themselves received twice that amount.⁷ Under the pro-

⁴ Orfield, M. N., "Federal Land Grants to the States," pp. 43, 67.

⁵ *Ibid.*, p. 53 *et seq.*

⁶ Reports of the Commissioner of the General Land Office; 1921, 1922, 1923.

⁷ "Land Grants Made by Congress," Statement of the General Land Office, 1915.

visions of an act of 1841 nineteen states were given five hundred thousand acres each for internal improvements.⁸

During the last two decades the public domain states of the West have complained that the large areas of untaxed federal lands within their borders have seriously curtailed their sources of revenue. To correct this situation, Congress has provided for turning over to them a portion of the receipts from the national lands within their borders—twenty-five per cent of the national forest revenues,⁹ fifty per cent of the royalties from potassium deposits,¹⁰ thirty-seven and one-half per cent of the receipts from oil lands and water power licenses.¹¹

From time to time Congress has made other grants of land and money. Every public land state has received a portion of the receipts from the sale of the national domain within its borders.¹² On two occasions surplus funds accumulated in the national treasury have been distributed among the states in proportion to their Congressional representation. Twenty millions of dollars were thus apportioned in 1837. The arrangement proved so popular that in 1841 an act was passed providing for still further distributions; but it did not remain long in force.¹³

⁸ Keith & Bagley, *op. cit.*, p. 45 *et seq.*

⁹ 36 Stat. L. 963; 38 Stat. L. 441.

¹⁰ 40 Stat. L. 300.

¹¹ 41 Stat. L. 450, 1073.

¹² Orfield, M. N., *op. cit.*, pp. 79, 80.

¹³ Keith & Bagley, *op. cit.*, pp. 55-61.

The various acts making grants of land to the states differed radically from the more recent "fifty-fifty" subsidy laws, in that they contained almost no provision for federal supervision. For three-quarters of a century Congress merely stipulated that money derived from the sale of the lands it gave should be devoted to public schools, or highways, or something of the sort. The manner of sale, the minimum price, the administration of funds—all these matters were left for the states to decide. And in most cases the decisions of the states were, to use a charitable term, unwise. Ohio set an example for its neighbors when it spent its entire endowment for temporary needs, substituting for it an "irreducible debt" to trouble future generations of taxpayers. Other states were not far behind. Some engaged in wilcat speculation, while others sold for three dollars an acre land which the following year brought twenty-five. In 1919 the State Treasurer of Wisconsin declared: "If the State of Wisconsin had not practically given away its valuable school lands years ago, we would not have to raise any school taxes for generations to come. In years gone by the State sold hundreds of thousands of acres of fine timber lands for a mere song. Had that timber been preserved . . . it would now maintain the schools of the State for generations to come without raising one cent for school purposes by taxation."¹⁴

¹⁴ Keith & Bagley, *op. cit.*, pp. 55-61.

Congress has made some effort to safeguard the gifts of land made to the states during the last fifty years. Beginning with the stipulation in the 1875 enabling act of Colorado that there must be a public sale, with a minimum price of two dollars and fifty cents an acre,¹⁵ the conditions attached to each new transfer of a portion of the public domain have become more numerous and more specific. Typical of the more recent land grants is the so-called Carey Act of 1894, which donated to the states a portion of the desert areas within their borders.¹⁶ Under its terms each state was required to irrigate the lands it desired and prepare them for settlement within a ten-year period.¹⁷ Title was to pass only upon the completion of state programs. By the end of the fiscal year 1927 ten states had applied for lands totalling nearly eight and one-half million acres. Many of their projects had failed to meet federal approval, however, and they had received title to but little more than one million.¹⁸

The conditions attached to the grants of land made to Arizona and New Mexico in 1910 showed that Congress had profited by its earlier experiences, and was determined to safeguard its future gifts to the states. Two state officers, the governor and the secretary of state, were required to approve all in-

¹⁵ 18 Stat. L. 476.

¹⁶ 28 Stat. L. 422.

¹⁷ Later extended to fifteen years. Cf. 31 Stat. L. 1133, 1188.

¹⁸ Figures supplied by the General Land Office, Department of the Interior.

vestments of funds derived from the sale of the lands, and the act further stipulated that the "disposition of said lands, or of any money or thing of value directly or indirectly derived therefrom, for any object other than that for which such particular lands, or the lands from which such money or thing of value shall have been derived, were granted or confirmed, or in any manner contrary to the provisions of this act, shall be deemed a breach of trust."¹⁹

All doubt as to the ability of the federal government to enforce such requirements was dispelled by the Supreme Court of the United States in 1919, in the case of *Ervien v. U. S.*²⁰ Four years previously the legislature of New Mexico, over the governor's veto, had authorized the Commissioner of Public Lands of the State to expend a small percentage of the funds derived from the sale of lands in advertising New Mexico's resources and advantages. The State Commissioner defended the statute on the ground that Congress had made no provision for administering the fund, and that a small amount of advertising was a necessary and proper administrative expense.

But the Supreme Court brushed aside this reasoning, and definitely recognized the right of Congress to give portions of the public domain to the states

¹⁹ 36 Stat. L. 564, 575.

²⁰ 251 U. S. 41.

upon such conditions as it might deem necessary to protect the interests of the nation. "The United States, being the grantor of the lands, can impose conditions upon their use, and has the right to exact performance of the conditions," declared Mr. Justice McKenna, speaking for an unanimous court. This decision has greatly strengthened the hand of the federal government. The stipulations made in even the most recent land grant statutes are inadequate; but such as they are, they may be enforced.

b. THE AGRICULTURAL COLLEGES

The present federal aid system is a product of the last two decades, but it had its inception in 1857, when Justin S. Morrill of Vermont introduced in the House of Representatives a bill donating land to each of the several states for "the endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts." ²¹

A number of conditions were attached to the grant, and though they imposed no very onerous burden upon the states, they aroused the ire of the Southern members of Congress. "This bill treats the

²¹ 12 Stat. L. 503.

states as creatures . . . instead of creators, and proposes to give them their own property and direct them how to use it," declared Clay of Alabama when the measure reached the Senate.²² Other Southern senators uttered fearful maledictions against the federal government for its attempted usurpation of power, but the bill passed both houses of Congress, only to be vetoed by President Buchanan.

Re-introduced in 1861, the proposed law again met the opposition of Southern members in both houses, and did not become law until 1862, when they had withdrawn from Congress. Viewed in the light of present-day subsidy legislation, the Morrill Act of 1862 seems like a halting and rather ineffective attempt to safeguard federal grants. It made a distinct advance, however, over earlier laws. The states were required to invest the money derived from the sale of the land in "stocks²³ of the United States, or of the States, or some other safe stocks, yielding not less than" five per cent, and were directed to use only the interest, retaining the principal as an "inviolable fund," for whose permanence they were made responsible.

The governor of each state accepting the act was directed to report annually to Congress the amount of sales and the disposition of the funds thus raised.

²² Cong. Globe, 35th Cong., 2nd Sess., p. 717.

²³ "Bonds" substituted for "stocks" by an amendment of Ap. 13, 1926.

In addition, state reports were required from year to year showing the progress of the colleges. There were few other limitations. Apparently state responsibility ended with the submittal of annual reports, even if those reports revealed little or no progress. One section of the law, however, insured a considerable measure of state support for the newly endowed colleges by providing that no portion of the federal funds might be applied, "under any pretext whatever, to the purchase, erection, preservation or repair of any building or buildings."²⁴ Since institutions of learning can not be called into being without buildings and equipment, the procurement of these essentials became a direct state obligation.

As finally passed, the Morrill Act granted thirty thousand acres to each state for each of its senators and representatives. Each state was given two years to accept the federal offer through its legislature, and five years to establish a college. These periods were later extended, and the benefits of the act made available to all states subsequently entering the Union.²⁵ States having no national lands within their borders were given land scrip instead, and more than two-thirds of the total grant was made in this form. Since Congress neglected to set a minimum price, most of the scrip was sold at ludi-

²⁴ 12 Stat. L. 503.

²⁵ 14 Stat. L. 208.

crously low figures. Fifty or sixty cents an acre was not uncommon.

While most of the states were thus wasting their heritage, New York assigned all its scrip to Ezra Cornell at sixty cents an acre, with the understanding that he should pay for the land as he sold it, and that all receipts above sixty cents an acre should become an endowment for a university. Mr. Cornell located the scrip in the white-pine district of Wisconsin, and eventually sold most of the land at an average price of six dollars and seventy-three cents an acre. This gave Cornell University an endowment in excess of five and one-half million dollars.²⁶ Some years later, Congress fixed ten dollars an acre as the minimum price at which the college lands might be sold.

In 1890 was passed the Second Morrill Act, a significant piece of legislation which provided for the further endowment of the land-grant colleges and for the further extension of federal supervision. An annual appropriation was made, gradually rising to a maximum of twenty-five thousand dollars²⁷ for each state and territory, "to be applied only to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural and economical science, with special reference to their applications in the

²⁶ Keith & Bagley, *op. cit.*, p. 74.

²⁷ Increased to \$50,000 by act of 1907: *cf.* 34 Stat. L. 1256, 1281.

industries of life and to the facilities for such instruction." ²⁸ Coupled with this limitation upon the use of the federal grant was the usual stipulation that no portion of it should be used for buildings.

The real contribution of the Act of 1890 to the evolution of the federal aid system was the clause which empowered the Secretary of the Interior to withhold its annual allotment from any institution not fulfilling its obligations. For the first time the federal government found in its hands a weapon with which to force state compliance with its requirements. True, the potency of the weapon was weakened in several ways. For one thing, the limitations upon state activity were so few and expressed in such general terms as to have little significance. Also, the act expressly authorized an appeal from the Secretary of the Interior to Congress, and the danger of political interference involved in an appeal to Congress is apparent. Fortunately, the danger has proved more apparent than real. In theory, the likelihood of securing unanimous state action was greatly lessened by the fact that each state possessed the right of refusing all federal supervision of its affairs. But since the refusal of federal supervision meant also the refusal of proffered federal money, the states hastened to comply with Congressional requirements. Here at last was a new and highly effective administrative device, based on the ac-

²⁸ 26 Stat. L., 417.

curate assumption that the states could be induced to accept almost any suggestions of the federal government, if only Congress would appropriate sufficient funds to make it worth their while. This principle has been used in all recent subsidy legislation.

The Bureau of Education has been given the task of administering the two Morrill Acts and their amendments. Representatives of the Bureau make annual visits to the agricultural colleges in the several states. Their sole duty is to make certain of state compliance with every legal requirement; the wisdom of state policies does not concern them. Instructors in French or Spanish may not be paid from federal funds, since these subjects are not mentioned in the law; but teachers of English are entitled to federal money, regardless of their qualifications.²⁹ The supervisory powers of the Bureau of Education are thus narrowly restricted. Its activities consist largely in preventing the state colleges from violating the explicit provisions of federal statutes rather than in formulating constructive programs of work. It must be remembered, however, that the Morrill Act of 1890 was the first law to provide for real federal supervision of state activities. It was only a halting gesture, but it pointed the way to effective centralized administration.

²⁹ "Federal Legislation, Regulations and Rulings Affecting Agricultural Colleges and Experiment Stations," Bulletin of the States Relations Service, pp. 12-14.

C. THE EXPERIMENT STATIONS

In 1887 was passed a law, commonly known as the Hatch Act, which provided for the establishment and maintenance of an experiment station in connection with each of the agricultural colleges established under the First Morrill Act.³⁰ Fifteen thousand dollars a year was originally appropriated to each state and territory for this purpose; later the amount was raised to thirty thousand,³¹ and in 1925 the Purnell Act provided for additional increases gradually bringing the total up to ninety thousand dollars annually for each state and territory.³²

These stations were directed to conduct "researches or experiments bearing directly on the agricultural industry of the United States," and to publish quarterly bulletins setting forth the results of their investigations. The act of 1887 originally stipulated that the federal offer must be accepted by the legislatures of the several states, but a subsequent amendment authorized the governors to give provisional assent.³³

From an administrative standpoint the law was notable chiefly for its failure to make any adequate provision for federal supervision. It merely stipulated that "in order to secure, as far as practicable, uniformity of methods and results in the work of

³⁰ 24 Stat. L. 440.

³¹ 34 Stat. L. 63.

³² \$60,000 under the Purnell Act; \$30,000 under previous legislation.

³³ 25 Stat. L. 176.

said stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiment; to indicate from time to time such lines of inquiry as to him shall seem most important, and, in general, to furnish such advice and assistance as will best promote the purpose of this act.”³⁴

In 1906 the hand of the federal government was considerably strengthened by the passage of the Adams Act. This statute, in addition to increasing federal appropriations, required from each experiment station a detailed statement of receipts and disbursements of federal money on schedules prescribed by the Secretary of Agriculture. Should any state lose or misapply federal funds and fail to replace them, or should it neglect any of the other obligations imposed upon it by the act, its further allotments might be withheld pending an adjustment satisfactory to the federal government.³⁵

Federal supervision, though greatly restricted by the terms of the law, has brought about a more careful accounting of federal funds. The Hatch and Adams Acts are administered by the Office of Experiment Stations of the Department of Agriculture, whose representatives visit the stations annually, inspecting the work and examining the finan-

³⁴ 24 Stat. L. 440.

³⁵ 34 Stat. L. 63.

cial reports. The personal visits are supplemented by extensive correspondence throughout the year. By agreement with the state directors state plans of work are submitted in advance, and thus it is often possible to eliminate objectionable outlays from a state plan before it is put into effect. Frequently, however, it becomes necessary to reject expenditures that have been made by the states for purposes not contemplated by the federal act. Some of the most common of such items are: salaries of officers engaged in teaching instead of research, apparatus not used for experimental purposes, publications not recording experimental work, and farm operations not involving experiments. Outlays of this character are reported by the Office of Experiment Stations as "unexpended balance," and are deducted by the Treasury from the following year's appropriation.

Every state has accepted the federal offer, and established an experiment station in connection with its agricultural college. State appropriations for the work are far in excess of the federal grant. In 1925, for example, they were more than four times as large.³⁶ Federal funds have furnished the necessary stimulus, and have awakened the states to their own responsibilities. All the more recent federal subsidy legislation is fashioned after the Morrill, Hatch and Adams Acts, though providing for a considerably larger measure of federal supervision.

³⁶ Report on the Agricultural Experiment Stations, 1925, p. 6.

CHAPTER III

FOREST FIRE PREVENTION

FIRE has been the chief offender in the devastation of the wooded regions of the United States. Year after year it has taken its fearful toll from every forested section of the country. During the three-year period ending December 31st, 1925, the average number of acres of timberland damaged each year was almost twenty-three million, with an average annual property loss of thirty-one million dollars.¹ Nearly two decades ago it became generally recognized that the protection of the nation's timber supply was a problem demanding national recognition, and in 1911 Congress appropriated two hundred thousand dollars, available until expended, "to enable the Secretary of Agriculture to co-operate with any State or group of States, when requested to do so, in protection from fire of the forested watersheds of navigable streams."²

This statute, popularly known as the Weeks Act, marked a new development in the technique of American federal administration. Under its terms a

¹ Figures supplied by U. S. Forest Service.

² 36 Stat. L. 961.

state could receive federal aid only after it had established a system of fire protection, and had appropriated for the work a sum at least as large as the federal grant. But federal money and the state appropriations matching it were to be spent by the states through their own officials, subject to federal approval. Here in embryonic form were the characteristic features of the American subsidy system. Plans of work were to be formulated by the states and carried out by them; inspection of state activities was to be the task of the federal government; and state matching of federal funds was required. Practically every subsequent federal aid statute has contained similar provisions.

The more recent subsidy laws have generally apportioned federal funds on the basis of population, but the Weeks Act left the matter of apportionment entirely in the hands of the Secretary of Agriculture. Under his ruling, need was made the basis of allocation. The measure of each state's need was to be the cost of thorough protection of its forest lands. The cost of safeguarding adequately the timber supply of each state has been determined in consultation with state officials, and these figures, which are subject to occasional revision, have been made the basis of distribution of federal money. Allotments vary widely from state to state, depending on the quantity and quality of the timberland to be protected, and the fire hazard. In 1927 the sum of one

hundred and twenty dollars was apportioned to South Dakota, while more than forty-eight thousand dollars were made available for Minnesota, with its forests of white pine.³

Co-operation with the states under the terms of the Weeks Act began in the spring of 1911, and within a year eleven states had applied for and received allotments.⁴ The original grant was soon expended, and yearly appropriations of one hundred thousand dollars were made by Congress until 1921, when the annual subsidy was raised to one hundred and twenty-five thousand. The following year it was increased to four hundred thousand dollars.⁵ Then in 1924 came the Clarke-McNary Law, which not only carried with it increased authorizations, but made a number of significant changes in the plan of federal co-operation.

The Weeks Act had limited the use of federal funds to the protection of the forested watersheds of navigable streams, ostensibly because of the importance of such areas in regulating stream flow. It may be that Congress also desired to evade the question of unconstitutionality by relating fire protection to interstate commerce. If so, it had grown bolder by 1924, for the Clarke-McNary Law authorized federal grants to the states for the protection

³ Forest Service Bulletin, "State Co-operation under the Weeks Law."

⁴ Circular No. 205, Forest Service, 1912.

⁵ 39 Stat. L. 1166; 40 Stat. L. 1005; 41 Stat. L. 268, 1344.

from fire of all private or state forest lands.⁶ A subsequent amendment and a Department of Agriculture ruling have made clear that "forest lands" include all classes of forest areas, "whether timbered, cut over, or burned, and watersheds supplying water for domestic use or irrigation."⁷

The Secretary of Agriculture is free to co-operate with any state which in his opinion is making a real effort to protect its forest lands from fire. To quote the Act: "If the Secretary of Agriculture shall find that the system and practice of forest fire prevention and suppression provided by any State substantially promotes" the adoption of suitable protective measures, "he is hereby authorized and directed, under such conditions as he may determine to be fair and equitable in each state, to co-operate with appropriate officials of each State, and through them with private and other agencies therein, in the protection of timbered and forest-producing lands from fire." The Congressional appropriation to carry out the provisions of the law was seven hundred and ten thousand dollars for the fiscal year 1927.

The first step in the scheme of co-operation is the submittal by each state of a plan of fire protection. This plan includes maps showing the areas to be protected, the headquarters and approximate routes

⁶ 43 Stat. L. 653.

⁷ Co-operative Program of the Department of Agriculture under Sections 1-4 of the Clarke-McNary Law.

of patrolmen, and all other necessary information. It must be approved by the Forest Service, which has been charged with the administration of the federal statute. The Forest Service will accept any plan which gives reasonable promise of producing satisfactory results. As might well be expected, the plans submitted vary greatly in accordance with state needs and also in accordance with the diverse views of state foresters. Three main types of state organization have developed, however, with any number of variations. One is the centralized administration type, of which Pennsylvania is an excellent example. The state forester has complete responsibility for protecting the wooded lands of the state against fires, and complete authority to enable him to do so. He selects the state's staff of forest fire fighters. The state pays the entire cost of protection, and the fund is expended through his office. The counties and towns have nothing to do with the matter. In New England, on the other hand, the decentralized administration type of organization is prevalent. Each town is made responsible for fighting fires on the wooded areas within its own borders, and a large measure of authority is vested in the locally selected town wardens. Not only are many of these men ignorant of even the fundamentals of fire protection, but in some states it is not uncommon for them to refuse flatly to co-operate with their neighbors. Many a Massachusetts town

warden has waited patiently for fires to cross his town line before making any attempt to check them. "I have responsibility for putting out fires, but no authority," declared the state forester of Massachusetts recently. Other New England states, similarly handicapped, have enacted corrective legislation. In the great forest states of the Northwest is found still another type of organization, based on the activities of the private associations. The large timber owners of these states have developed highly efficient fire-fighting organizations for the protection of their holdings, and the state governments have made these organizations the basis of their own systems of fire protection. In some states the state holdings are widely scattered, and occasionally it has even been found profitable to entrust the entire work of fire protection and fire fighting to the private associations. In such cases, state and federal funds are paid to these associations, and state officials supervise their work. The rôle of the federal government is limited in large measure to an inspection of state supervision and a careful scrutiny of state and private expenditures. The private owners could safely be relied upon to protect their commercial timber without the stimulus of a subsidy; but frequently they would ignore fires on cut-over land and protective forest areas unless the commercial timber was menaced. Federal aid insures a balanced system of fire protection.

In the early days of experimentation following the passage of the Weeks Law, the plan was tried of maintaining in each state a force of federal patrolmen as an integral part of the state organization, chosen by the state forester and responsible to him.⁸ This arrangement proved cumbersome, however, and eventually it was abandoned. The entire work of fire protection is left to the states, and federal funds, like the state appropriations which match them, are expended under the direction of state foresters. Federal inspectors examine the state protective systems, and audit state accounts. At present there are seven district forest inspectors, each assigned to a territory comprising several states. The thoroughness of federal inspection varies with the temperaments of the men, the size of their jurisdictions, and the character of state protection. In some of the Southern states it is largely nominal, because the district inspector assigned to those commonwealths is also responsible for Ohio, Pennsylvania, New Jersey, Delaware and Maryland. This situation is soon to be remedied, however, by the appointment of an additional inspector, with headquarters at New Orleans. The examination of the fire systems of a few of the more progressive Eastern states is also little more than nominal, because of their consistently high standards. Federal officials in these states

⁸ Circular No. 205, Forest Service, 1912; Proceedings of the Second Conference of Weeks Law Collaborators, 1920, p. 5.

have found year after year that they have been able only to say: "That's a fine job; I congratulate you." So at present they do little more than audit accounts. But the vast majority of the states need very careful scrutiny, and get it. In the average state, federal inspection means a visit of from six to eight weeks every year. Most of that time is spent in the field, eating and sleeping with the state crews. Often the federal man takes occasion to speak of the latest practices in fire prevention, while he notes errors which must later be brought to the attention of the state forester. Not infrequently he brings to the patrolmen badly needed words of encouragement, for they are a lonely lot, having few contacts with civilization. He knows those men as few people know them. He knows their virtues and their faults—whether their work measures up to the standards of the Forest Service. Most of them he can call by their first names.

Every federal bureau administering a subsidy law, involving as it does co-operative relations with the states, is confronted with the necessity of determining how strict a supervision it will exercise over state activities. It must make a careful audit of state accounts; that is required by law. But shall it go further, and carefully inspect state standards of performance? The more recent subsidy acts permit a considerable measure of discretion. The federal bureau which deliberately adopts a policy of

non-interference risks the charge of undue laxity. On the other hand, the bureau which makes a comprehensive inspection of state activities and strictly enforces its rulings is apt to be accused of attempting to dominate and standardize state administration.

The Forest Service has adopted a policy of fairly strict inspection, but has carried out this policy in such a tactful manner that it has given little offense to state officials. During the summer of 1926, thirty state foresters were asked whether the Forest Service had ever tried unreasonably to control their affairs. (Only thirty-three states co-operate under the Clarke-McNary Law.) Twenty-six of the thirty replied emphatically that they had seen no evidences of federal domination. The other four felt that federal officials had been guilty of unreasonable interference in local matters. Criticism of the Forest Service was confined almost entirely to the Southern states, and there is no doubt that in the South there had been considerable ground for irritation. State foresters had found it distinctly advantageous to conform to federal policies. But such a condition of affairs has never been widespread, as evidenced by the dearth of complaints from other sections of the country. The Forest Service has already taken steps to remove the causes of Southern dissatisfaction.

The salaries paid to the federal district inspectors average about thirty-eight hundred dollars. Until

recently they were considerably lower. Compared with the state foresters, the federal men are probably compensated adequately. But the high-grade forest experts needed to inspect state activities and stimulate state interest cannot be procured for four thousand dollars a year or less. The best men seldom enter the service of state or nation; the few exceptions remain but a short while until they are tempted away by private lumbering companies at salaries so large as to make governmental competition impossible. The Forest Service has not been unmindful of this state of affairs, but it has deliberately limited its expenditures for administrative purposes to ten per cent of the total appropriation, knowing that excessive administrative costs would furnish excellent ammunition for the opponents of federal aid. In view of the poor salaries, the calibre of the inspectors is surprisingly high. They are trained, able foresters. Most of them were not sufficiently familiar with the technique of fire protection and fire fighting when first they received their appointments, but time has remedied this defect. All seven are overworked. They apportion their time as best they can, but some of their inspections must of necessity be hurried and superficial. Fourteen or fifteen inspectors are needed instead of seven, and higher salaries are essential. It is difficult to procure suitable men at the present rate of compensation.

The federal inspectors are chosen on the basis of merit, without regard to political considerations. Unfortunately, in many of the states politics is the determining factor in the selection of foresters and their assistants. In practically every section of the country, state foresters are chosen because of their knowledge of vote-getting rather than their knowledge of forestry. Payrolls of state forestry departments are frequently padded with the names of political appointees. In one Western state an able forester, selected as head of the state department because of the pressure of the lumber interests, had scarcely assumed the duties of his office before he received from the governor a list of the men whom he was to appoint as his subordinates. Many other states are similarly affected in varying degrees.

The Forest Service might well refuse to co-operate with those states which permit politics to interfere seriously with their standards of performance. It actually does nothing of the kind, however. Federal money, like the rain from heaven, descends alike upon the just and the unjust. A serious attempt is made, however, to better conditions in the less satisfactory states. The Forest Service contends that the effect of withdrawing federal co-operation would be only to give state officials a freer hand in their political maneuvering, since the federal subsidy for fire prevention is so small that its loss would be a matter of no great moment. The threat of with-

drawal, according to the Forest Service, is a much more potent weapon than actual severance of relations. The federal grant is an effective entering wedge. While it is paid to a state the federal officials are able to exercise a considerable measure of control over the state's methods of fire protection. They may be unable to prevent the selection of a politician as forester, but they are in a position to guide his activities when he becomes forester. Because they seldom interfere with state personnel, they are much more likely to secure acceptance of their ideas concerning state policy. Even in matters of personnel the Forest Service occasionally, though infrequently, takes an active hand. It does so indirectly. Never does it present to a state the ultimatum: "Get rid of your forester, or you will receive no more federal aid." But more than one state forester has been forced out of office because it was known that he was *persona non grata* at Washington.

Several of the federal bureaus administering subsidy laws have set up minimum qualifications for state employees whose salaries are paid in part from federal funds. The establishment of these qualifications has aided materially in reducing the number of political appointments. Unfortunately, no such standards are set up in forestry work. Federal regulations do not prescribe the minimum training and experience to be required of employees of state forestry departments. Such matters are left in the

hands of the states. The Forest Service believes that definite federal requirements would arouse resentment, and points out that its inspectors soon learn whether the state men are fitted for their jobs. Experience under other subsidy laws shows that the fear of state resentment is without foundation. Most of the state directors of extension work and vocational education welcome the federal regulations as a shield from the assaults of local politicians. State foresters, denied a similar protection, are often forced to bow to the demands of expediency. A state patrolman cannot long conceal his inadequate training and experience from the practiced eye of the federal supervisor, but often he remains in the state service long after his unfitness has become clear.

A number of experienced foresters believe that even the setting up of minimum qualifications for the personnel of state forestry departments would fail to produce the desired results. According to their contention, the federal government should require that every state employee paid in part from federal funds be chosen by some form of civil service. This suggestion has received no serious consideration, however, and probably deserves none. Such a requirement, if phrased in specific terms, would be the equivalent of a state civil service law passed by Congress. It would doubtless occasion a great deal of irritation among state officials, for it

would extend federal authority farther than it has ever yet been carried through the subsidy system. Yet if the stipulation were worded in such general language as to give no one offense, it could be evaded so easily that it would be of negligible value.

Since the federal government familiarizes itself with the work of the state forestry departments only by means of irregular inspections and regular audits and reports, and is not in constant contact with every phase of the state work, an excellent opportunity is afforded dishonest state officials to misrepresent their expenditures of Clarke-McNary funds. Such deception cannot be carried on very extensively, for it will soon reveal itself in the character of the state fire protective systems. But a certain amount of it undoubtedly does exist. Employees ostensibly engaged in forest fire prevention are sometimes assigned to other work not included in the federal program. State funds allegedly appropriated to match the federal grant are at times used for very different purposes. Instances of this sort seem to be surprisingly rare, however. Current rumor is to the effect that federal inspection makes systematic deception on a large scale impossible. In so far as rumor may be relied upon, it indicates a high degree of federal efficiency. The states must be trusted in large measure, or the inspectional staff of the Forest Service increased tenfold.

The Weeks and Clarke-McNary Laws have proved

a most remarkable incentive to the development of state protective programs. Thirty state foresters were asked whether, in their judgment, federal funds had stimulated the work of fire protection in their states. All but three replied in the affirmative. Some were very emphatic. "The federal allotment has been probably the greatest stimulus to our forestry work," declared one. "Clarke-McNary funds have roused this state to a recognition of its responsibility," said another. Statistics add weight to their opinion. State expenditures for forest fire protection increased more than four hundred per cent between 1912 and 1927. In 1912 the total state expenditure was three hundred and fifty thousand dollars; by 1927 the total had passed the two million dollar mark. During this period federal outlays increased even more rapidly, but they have kept well below state expenditures. In no year have they exceeded thirty-five per cent of the state outlay, and usually they have been nearer twenty or twenty-five per cent. It is clear, therefore, that the burden of responsibility still rests upon the states, and that federal funds are useful chiefly for two purposes: inspiring greater state activity and purchasing the right of federal inspection. The success of the federal policy may be measured not only by the growth of state expenditures, but by the increase in the number of states co-operating and in the number of acres protected from fire. Thirty-three states are

now co-operating with the federal government, as compared with eleven in 1912; and the protected area has grown from sixty-one million acres to one hundred and ninety-six million. The following table shows the development of fire protection under the Weeks and Clarke-McNary Acts.⁹ Some of the figures of state expenditure are approximate.

Fiscal Year	No. of States Co-operating	Area Protected (in acres)	Federal Expenditure	State Expenditure
1912*	11	61,000,000	\$ 53,287.53	\$ 350,000.00
1913	12	68,000,000	53,247.82	380,000.00
1914	17	83,000,000	79,708.27†	415,000.00
1915	18	95,000,000	69,581.75	505,924.70
1916	20	98,000,000	90,481.28	408,087.08
1917	21	103,000,000	90,580.14	435,328.11
1918	21	104,000,000	98,529.75	565,625.24
1919	22	110,000,000	99,921.38	625,445.54
1920	23	121,000,000	95,107.86	860,919.49
1921	24	149,000,000	119,529.83	1,066,027.17
1922	26	169,000,000	400,000.00	1,757,000.00
1923	26	166,000,000	394,094.64	1,826,685.78
1924	28	170,000,000	396,479.82	1,473,084.96
1925	29	171,000,000	397,646.97	1,844,191.70
1926	32	175,000,000	638,427.59	1,874,893.19‡
1927	33	196,000,000	654,101.57	2,009,416.06

* Period March 1, 1911 to June 30, 1912.

† Expenditures partly made from funds of preceding year.

‡ Includes \$263,512.58 expended by private agencies.

Despite the remarkable progress that has been made, the task of adequately protecting the forests of the nation from fire is far from complete. The Forest Service estimates that the total number of

⁹ Table supplied by the U. S. Forest Service.

acres of state and private forest lands needing protection is three hundred and eighty-one million. Less than half of this area is now properly guarded, chiefly because of insufficient appropriations. Annual expenditures of ten million dollars are needed, according to federal calculations. If we assume that private owners may properly be expected to bear one-half of this expense,¹⁰ the combined financial responsibility of the federal and state governments amounts to about five million dollars. At present they are expending only half that amount.

The Forest Service has been remarkably successful in its effort to raise state standards. Despite the handicap of local politics, the calibre of state men and the quality of state equipment have constantly improved. The thirty state foresters whose opinions on other matters have previously been quoted were asked if federal inspection had in any way affected their standards of fire protection. "Yes; bettered them," was the reply of nineteen. "If we had waited for the individual states to take the initiative in the forestry movement, all the virgin timber of the country would have disappeared before any adequate steps were taken," declared one. Eleven state foresters said that their standards were higher than federal requirements. Some of the eleven were undoubtedly correct. They rep-

¹⁰ The Forest Service makes this assumption in administering the Clarke-McNary Act.

resented wealthy, progressive states little affected by local politics. Three or four who denied the beneficial influence of federal inspection may well have been animated by a desire of receiving undivided credit for improved conditions, for private timber owners within those states have a considerably higher opinion of the value of federal inspection. At any rate, it is safe to assume that state standards have been raised in those states whose foresters replied affirmatively, since men are not prone to give undue credit to others. More than sixty per cent of the state systems of fire protection may therefore be said to function more efficiently because of federal co-operation.

Occasionally the charge is made that the Forest Service is trying to force upon the states a uniform type of administrative organization, regardless of local conditions and local needs. Apparently there is no truth in this accusation. There are several types of organization functioning successfully without federal interference in the states, and all but two or three of the state foresters declare that the Forest Service makes no attempt to secure an unreasonable amount of uniformity. The federal men, having an opportunity to observe conditions in every section of the country, naturally protest if a forester submits a plan already tried and abandoned by a dozen other states. But every such protest is apt to evoke the charge of dictation. It is significant that so few

charges have been made, and also that they have come from the states making the smallest expenditures, compared with their needs, for forest fire prevention. Strikingly inadequate appropriations do not necessarily indicate strikingly inefficient administration; but there is apt to be some degree of correlation. Then, too small appropriations often mean newly established departments, with greater need for federal suggestions and federal guidance.

State accounting is a field in which uniformity of method is generally recognized as desirable. The Forest Service does not insist upon a uniform system of accounting, but it asks for detailed reports upon forms which it submits to the states. To supply the required information, state records must be kept in a certain manner, and thus a degree of uniformity is obtained. More general adoption of a standard system of accounting would greatly facilitate the federal audit.

The Weeks Act of 1911 merely made provision for forest fire protection—"protection from fire of the forested watersheds of navigable streams." The Clarke-McNary Law of 1924 not only extended the basis of protection, but made allotments of federal funds to the states for two other phases of forestry work. Section four authorized the Secretary of Agriculture to co-operate with the states "in the procurement, production, and distribution of forest-tree seeds and plants, for the purpose of establish-

ing windbreaks, shelter belts, and farm wood lots upon denuded or nonforested lands.”¹¹ Nineteen states had already undertaken this work when the Clarke-McNary Act was passed. New York and Pennsylvania, the leaders, were each growing nearly ten million trees annually in their state nurseries, and distributing them among their citizens. Many of the states, however, were hindered by inadequate funds, or were unauthorized by legislation to grow and distribute forest trees.

The importance of the task and the inactivity of many states made federal aid seem desirable. Several million acres of unused farm land were available for the production of valuable timber. Some fifteen thousand acres were in process of transference from the non-productive to the productive class each year, but at that rate the job would have taken about six centuries. So federal funds were offered the states under the usual conditions—state matching of federal money and federal inspection of the joint expenditures.¹²

Within a year, twenty-five states had applied for federal funds. Their plans submitted for federal approval included the establishment of new nurseries, the enlargement of existing nurseries, in order to grow more trees, and the distribution of trees and seed in rural sections. Some plans called for free

¹¹ 43 Stat. L. 653.

¹² Report of the Forester, 1925.

distribution; most states, however, have found it advisable to charge at least a nominal sum. The Forest Service favors a charge based on cost of production, but permits each state to determine its own policy. Requests for planting stock are far more numerous, of course, when the trees may be procured without cost; but the experience of several states has shown that trees are better cared for and more highly valued if they are not given away. In one state which distributes its nursery stock gratis, a large land owner requested ten thousand trees. They were promptly sent to him, but several months later he complained that they had never been received. Investigation by state officials disclosed that the trees had been planted in the boxes in which they originally came—and planted several feet underground. The owner would probably have taken more trouble to inspect the work of his employees had his bank account been affected.

In the North and East, the distribution of trees to private owners is generally regarded as a function of the state forestry departments. At the time of the passage of the Clarke-McNary Act, however, the agricultural colleges in a number of the Western states were engaged in this work, and so the Forest Service agreed to co-operate with any properly qualified state agency in the reforestation of farm lands. Some federal funds are used to obtain red

pine, which it is difficult for state nurseries to obtain in quantity. Occasionally the federal share is paid in seed instead of money. The Congressional appropriation for the work is so small—amounting to but seventy-five thousand dollars for the fiscal year 1927—that the Forest Service has made no attempt to apportion the money on the basis of need. Instead, two thousand dollars is allotted to each state. Surpluses, if any, are to be used to reward effort, as determined by the size of state appropriations.¹³

The Clarke-McNary Law also provided for federal aid to the states for educational work designed to stimulate interest in tree growing. Section five authorized the Secretary of Agriculture to co-operate with state officials for the purpose of assisting “the owners of farms in establishing, improving and renewing woodlots, shelter belts, windbreaks, and other valuable forest growth, and in growing and renewing useful timber crops.”¹⁴ Many states were carrying on work of this nature before the proffer of the federal subsidy. In some of them, representatives of their forestry departments spent a considerable portion of their time talking with farmers about the problems of tree growing and encouraging them to grow timber crops. In other states the county

¹³ “Co-operative Program of the Department of Agriculture under Sections 1-4 of the Clarke-McNary Law,” Department of Agriculture Bulletin.

¹⁴ 43 Stat. L. 653.

agents, carrying to the farmers the message of better crops as representatives of the agricultural colleges,¹⁵ stressed the importance of farm forestry.

The federal government sought to secure the co-operation of both these agencies, trusting them "in each State to determine in what manner they can best co-ordinate their work," according to the announced policy of the Department of Agriculture. A number of suggestions were made in this statement of policy. It was proposed that the state forester and the state director of extension work mutually agree upon working plans, that they pool their knowledge of forestry, and that they co-operate in selecting forestry extension specialists.¹⁶ Unfortunately, in many states these suggestions have been ignored. Divided responsibility has in some cases led to a duplication of effort, and in others to a total cessation of effort. In one state, the extension director and the state forester have not seen each other, according to current reports, for two years.

The theory of co-operative activity by two state agencies is excellent. Both the forestry department and the extension service are or should be interested in the work. The forestry department is in a position to supply the technical information needed by

¹⁵ Cf. *infra*, ch. 4, *passim*.

¹⁶ "Co-operative Program of the Department of Agriculture under Section 5 of the Clarke-McNary Law," Department of Agriculture Bulletin.

the farmers, while the extension service has a highly developed organization engaged daily in the task of spreading information among the farmers. Weaknesses in the administration of the act have been due to the unwillingness of some men to work together. And obviously they can not be compelled to do so. "Compulsory co-operation" is a contradiction in terms.

Federal inspection of state activities has been entrusted to the Extension Service of the Department of Agriculture, which is directed to employ an extension specialist in forestry "acceptable to the Forest Service." This specialist inspects the work done in the states. The annual appropriation made by Congress is only fifty thousand dollars, so that each state is entitled to but fifteen hundred. Federal funds must be matched, of course. The subsidy for the three phases of forestry—fire protection, distribution of stock, and extension work—is the smallest of all the federal grants, but it has increased state interest, stimulated state activity, and raised state standards.

CHAPTER IV

AGRICULTURAL EXTENSION WORK

THE early days of the present century found Southern agriculture in a perilous condition. Cotton was still king, but tottering on its throne. The ravages of the boll weevil had made profitable cotton growing almost impossible in some states, yet the vast majority of the farmers were totally unacquainted with other crops. In an effort to teach better methods of crop production, the Bureau of Plant Industry of the United States Department of Agriculture began in 1903 to set up demonstration farms in different sections of the South, on which legumes and new varieties of various crops were grown under ideal conditions. About fifty of these model farms were established, but they scarcely justified the expense and effort involved. People did not come in any large numbers to see them. Those who did come usually went away unimpressed. As one man remarked: "If I had the Government behind me, I could grow crops, too."¹

It soon became clear that the only way to interest the farmers was to enlist their help. So an effort

¹ "Co-Operative Extension Work, 1924," U. S. Department of Agriculture Bulletin, p. 37.

was made to meet the farmers personally, and enroll as many as possible in great co-operative demonstrations. Each farmer joining the movement was expected to cultivate ten or twenty acres under government supervision, and by the success of his enterprise induce many of his neighbors to follow his example. Federal agents, each assigned to a district of from ten to twenty counties, supervised the work. They answered questions, made suggestions, pointed out mistakes. Soon they became recognized leaders of the movement for a better agriculture.

In the fall of 1906 a Texas county requested the full-time services of a federal agent, offering to pay part of his salary. The funds for this purpose were raised by popular subscription, and the agent assigned. Within the next few months, similar arrangements were completed with seven other counties. The movement spread rapidly. It was stimulated by several large grants from the General Education Board of the Rockefeller Foundation. The "county agent," as he came to be known because of his affiliation with a single county, proved a profitable investment. His knowledge of agriculture and agricultural methods made him a welcome visitor. By 1914, more than seven hundred Southern counties and two hundred counties in the North and West were employing agricultural agents.²

² U. S. Department of Agriculture Miscellaneous Circular No. 59, p. 5.

In the spring of that year, Congress recognized the importance of the work by enacting the Smith-Lever Law, which provided for co-operative agricultural extension work between the United States Department of Agriculture and the land grant colleges in the several states, to "consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise."³

Provision was made for permanent annual appropriations gradually rising to four million five hundred and eighty thousand dollars. Supplementary funds regularly appropriated since 1919 have increased the total to nearly six millions. Congress took several precautions to safeguard this grant. Detailed statements of receipts and expenditures were required from the agricultural colleges, and from state treasurers. The act stipulated that money lost or misapplied must be replaced before further allotments would be paid. No portion of federal funds was to be used for buildings or land, and expenditures for the printing and distribution of publications were limited to five per cent. Federal allotments had to be matched, of course, but the states were given considerable leeway in raising

³ 38 Stat. L. 372.

their share. "No payment . . . shall be made . . . to any state unless an equal sum has been appropriated . . . by the legislature . . ., or provided by state, county, college, local authority, or individual contributions from within the state."

With the exception of a ten thousand dollar allotment to each state, federal funds were to be apportioned among the several states on the basis of rural population, as determined by census figures. This arrangement has worked some injustice, because of the manner in which the census bureau determines rural population. A community is rural, according to its definition, if its population is less than twenty-five hundred. As a result, many mining camps of Nevada and Pennsylvania have been classed as rural, while more than one New England "town," embracing a whole township, has been listed as urban because its total population exceeded the twenty-five hundred minimum. Approximately one million dollars is appropriated annually by Congress for co-operative extension work in additon to the regular and supplementary Smith-Lever funds, and this direct appropriation, which need not be matched by the states, is so distributed as to correct some of the injustices of the regular method of apportionment.

Under the terms of the memorandum agreed upon between the Department of Agriculture and the land grant colleges, each college maintains a distinct administrative division for the management and con-

duct of extension work, in charge of a director selected by the college and acceptable to the federal government.⁴ Nominally, each county agent is responsible to his state director, but actually the extent of such responsibility varies greatly from state to state. Since he is paid from federal, state, county, and not infrequently private funds, his allegiance is divided.

The duty of the county agent is to disseminate information regarding proper methods of farming. This he does, whenever possible, by means of actual demonstrations on the farmers' own land. He must constantly be making contacts, pointing out better crops and better ways of growing and marketing them. The measure of his success is the percentage of the farmers in his jurisdiction who adopt improved practices. He is a teacher—an itinerant teacher with some eager and some indifferent pupils. Nearly every farmer needs his advice, but many do not realize their need. His task is to interest people in his message of better agriculture. Not all his working hours are devoted to demonstrations. Contests are frequently used to stimulate interest. Among the boys and girls the idea of competition is particularly effective, but it has been used with considerable success among adult groups. Individuals vie with other individuals, communities vie with

⁴ U. S. Department of Agriculture Circular No. 203.

other communities, for the distinction of growing the largest and best crop of corn on five acres, or of raising the fattest and finest hog. The farmer who has experimented successfully with new crops or new methods can usually be induced to invite his neighbors to a field demonstration, at which he and the county agent point out the reasons for his success.

The activities of the county agents are numerous and varied. They teach soil improvement through the increased use of fertilizers and the introduction of nitrogenous crops such as sweet clover, soy beans, and cow peas. They emphasize the use of higher grade seed. The importance of tree crops is a part of their message. They encourage the breeding of better livestock, and lead the fight on animal diseases. Land improvement is a part of their program, whether the land needs terracing, draining, irrigating or clearing. They teach the use of dynamite. They show how to control rodent and insect pests.

Nor is the work of the county agents restricted to improving methods of production. Better marketing is emphasized. The farmer who keeps bees, for example, is shown how to grade his honey and how to pack it attractively. In many states, emphasis is placed on co-operative marketing. Farm management is another important phase of the work. Farm-

ers are taught how to keep accurate records of their transactions. Cost accounting is becoming more generally understood and used.

Less numerous than the male county agents, but carrying on an equally important work, are the female home economics agents. They bring to the farm women the message of better, brighter and more healthful homes. Employing essentially the same methods as the men agents, they show by actual demonstrations to individuals and groups how homes can be made more cheerful, how time and labor-saving devices can be used to advantage, and how the health of the family can be improved. Attention is given to such matters as nutrition, balanced diet, food selection and preparation, canning of fruits and vegetables, child feeding and care. Little groups of rural women are brought together to learn how to make their hats and clothing, and make them more attractively. Teaching the art of house furnishing is a part of the agent's work. Home management and home sanitation are not neglected. All the things that go to occupy the working hours of the rural housewife are included in the home economics program.

An important phase of county agent work is the education and stimulation of the young people of rural communities. This movement promises much for the future, for it is training the future leaders of American farm life. The boys and girls are en-

rolled in pig clubs, cotton clubs, corn clubs, canning clubs or other clubs suited to local conditions. As members, they are required to carry out projects involving the use of proper methods. Every member of a cotton club, for example, must select an acre of suitable land, properly prepare the soil, plant cotton seeds of the best grade, and cultivate the crop with care. Contests and prizes are used freely to keep interest alive. So successful has been this movement that more than half a million children are now enrolled in club work. In some of the wealthier states club agents are found in nearly every county, advising and guiding the boys and girls. But many rural counties find it impossible to support three agents, and so the more usual arrangement is a division of the children's work between the agricultural agent and the home economics agent, the man assuming responsibility for the boys' club work, and the woman directing club work among the girls.⁵

The negro is particularly amenable to the influence of agricultural extension work. Often he will follow instructions more carefully and painstakingly than a white man, with correspondingly better results. County agents frequently find the negro families among the most responsive in their communities. In the South, some three hundred colored men

⁵ "Co-Operative Extension Work, 1924," U. S. Department of Agriculture Bulletin, *passim*.

and women have been employed as agents to work with their own race, but generally the agents are white persons, bringing the message of better agriculture and better homes to white and black alike.

In no state is agricultural extension work compulsory. Each county decides for itself whether it is willing and financially able to support an agent. In a few states are agents "at large," assigned temporarily to new counties in the hope of stimulating interest. But unless the people of those counties soon decide to take over the work, the agents are withdrawn. The character of the local organization in charge of extension varies greatly from state to state. In some commonwealths the county commissioners (the local governing body) determine whether a county agent is needed. In others, the decision rests in the hands of voluntary organizations. Frequently a combination of these two methods is used. Until recently, in Minnesota the county government raised the money, and the county farm bureau, a voluntary association of farmers, decided how it was to be spent. In Illinois, the county farm bureau raises the funds necessary to meet the county's share of the expense, employs and dismisses the agent, and directs his activities. The members of the Massachusetts local organization, known as the "county trustees for aid to agriculture," are appointed by the governor, while the corresponding association of farmers in New Jersey is purely vol-

untary. Quite a number of states provide by law that funds shall be made available for extension work in any county upon presentation of a petition signed by a certain percentage of the county's farmers, property owners, or voters. Occasionally the plan is based on a fixed number of farmers, rather than a percentage.

The state director of extension work is expected to recommend to the counties properly qualified agents. The actual selection of an agent rests with the county itself, but the local officials almost invariably follow the advice of the extension director, and make their appointment from a list of names submitted by him. The agent's salary comes in part from federal funds, the remainder usually being made up by state and county appropriations. In Pennsylvania and California the counties are asked to pay only incidental costs, such as travelling expenses and office rent; while in Massachusetts the entire cost in excess of the federal allotment must be borne by the counties. Most states, however, lie between these two extremes. Federal and state funds combined make up part of the agent's salary, while the remainder is supplied by the county. Travelling and stenographic expenses and office rent are generally regarded as legitimate charges against the county treasury. These incidental items amount to surprisingly large totals by the end of the year. The agent is in the field most of the time, going from

one demonstration to another, or attending meetings and exhibits. He must have an automobile, and he must use it almost daily. Some of his working hours, however, must be spent in his office, for increasingly large numbers of farmers are coming to him for advice. Many county agents are in their offices one or two days every week, answering questions and making suggestions. Correspondence is voluminous, for rural folk have formed the habit of writing to the agent whenever they need guidance. The full-time services of a stenographer are generally necessary. Twenty-five hundred dollars a year for incidentals is not unreasonable, therefore, unless a county furnishes office space in the court house, as it frequently does. In about half the states, every county undertaking extension work receives an equal amount of state and federal funds, regardless of its population or wealth. The other states vary the amount of the federal-state contribution so that it will bear some relation to ability to support county agent work.

Usually an agent remains in the county to which he has been assigned until he resigns or until he ceases to satisfy the local authorities. Though the state directors possess the right of dismissal, most of them have adopted a "hands off" policy, believing that the test of an agent's success should be his ability to satisfy the men with whom he comes in daily contact. One failure to satisfy local officials

does not necessarily destroy an agent's opportunity for advancement in extension work; almost invariably he will be given a second chance in another county. But repeated failures are almost certain to be interpreted by the state director as a sign that the offender is unsuited, either by training or temperament, to extension work. In a few states the extension director actually exercises a considerable measure of control over the removal of agents. In Montana, which is typical of this group, the county authorities may not dismiss an agent without giving the state director ninety days' notice and preferring charges. If convinced that local politics is at the bottom of the matter, the director demands that the question of dismissing the agent be put before the people at some sort of special election, formal or informal. This arrangement prevents undue haste. It may also serve to keep agents on the job long after they have demonstrated their incapacity.

For years, the county agents in many of the states have worked without adequate organized local support. Even today hundreds of them play a lone hand. They talk with farmers one by one, instead of in groups. When they conduct a demonstration on a farmer's land, the farmer and his boys are the only observers. Then they move on to another farm to repeat the whole procedure. They waste a tremendous amount of time and energy, for it is as easy to talk to fifty persons as to five. Practically every

state has worked out on paper the details of a plan of local organization. A representative committee in each community, consisting of so many farmers, so many bankers, and so many merchants, is to be responsible for reaching the rank and file. But in a number of the less progressive commonwealths the plan has not gone far beyond the paper stage.

Recognizing the need for local organizations to co-operate with the county agents and make their work more effective, the United States Department of Agriculture some years ago sponsored a nationwide movement for the creation within each agricultural county of a "farm bureau," a voluntary association of farmers designed to further extension work. The farm bureaus were to differ from other agricultural associations in that their work was to be purely educational. The movement was popular, and spread rapidly. Members of the granges, farmers' unions, societies of equity and similar agricultural associations joined the farm bureaus. But it was not long before the farm bureaus began to engage in other activities. They undertook marketing enterprises, and as the local bureaus united to form state federations they carried on active lobbies for or against proposed legislation at the state capitals. In a short time they had become the rivals of other farm associations, performing largely the same functions and offering the same inducements to membership. Many county agents, who had been made sec-

retaries of the local farm bureaus in the early days of the movement, retained office and attempted to adjust themselves to the new rôle. They handled farm bureau funds and conducted membership campaigns. In some instances they devoted their working hours almost entirely to the service of bureau members. Naturally enough, rival farm organizations tended to display hostility toward the whole extension movement. Whatever extension work might be in theory, it was rapidly becoming in actual practice the handmaiden of a competing agricultural association, with local and state organizations integrated through a national federation.

Recognizing the danger to the extension movement, the United States Department of Agriculture and the American Farm Bureau Federation in the spring of 1920 entered into a memorandum of understanding intended to make clear the relationship of the county agent to the farm bureau. A portion of that memorandum is well worth quoting. "Since these county extension agents are part of the public service, as defined by the Smith-Lever Act, and receive some part of their salary from public funds, they are to perform service for the benefit of all the farming people of the county, whether members of the farm bureau or not, and are to confine their activities to such as are appropriate to public officials to perform under the terms of the Smith-Lever Act. . . . They will not themselves organize farm

bureaus or similar organizations, conduct membership campaigns, solicit membership, receive dues, handle farm bureau funds, edit and manage the farm bureau publications, manage the business of the farm bureau, engage in commercial activities, or take part in other farm bureau activities which are outside their duties as extension agents. The county agents and other extension agents will co-operate with the farm bureaus or other like organizations interested in extension work in the formation of county and community plans of co-operative extension work.”⁶

This memorandum did not have the effect of severing at a blow all questionable relationships of the county agents with the farm bureaus. Many agents were useful chiefly as bureau managers, and they had no desire to jeopardize their livelihood. In the summer of 1922 the Secretary of Agriculture found it necessary to issue a statement setting forth at still greater length the proper sphere of county agent activities. Gradually, however, the distinction between public and private work has been made clear. The farm bureaus have for the most part taken their place among the agricultural associations competing for rural favor. But in a few states the bureaus never lost their original character as purely edu-

⁶ Memorandum of Understanding between the Executive Committee of the American Farm Bureau Federation and the States Relations Service, U. S. Department of Agriculture, Relative to Farm Bureaus and the Extension Service. Dated April 22, 1920.

cational groups formed to advance extension work, and there they still serve as channels through which the agents reach the masses of the people. The farm bureau movement was conceived in all good faith to supply a real need, but in some respects it has injured the extension movement almost as much as it has helped it. The leaders of many farm organizations still regard the county agent as the representative of a rival group.

In a number of states the value of the agents is seriously diminished by their penchant for playing politics. The newly-chosen agent soon learns whom he must please in order to retain his position and secure advances in salary, and he is strongly tempted to serve mainly those few dominant figures in the community. His playing of politics may take the form of devoting an excessive amount of his time to the men whose favor he curries. It was discovered that one county agent was acting as manager of a local politician's farm during the hours he was supposed to be serving the community. Sometimes the agent actually goes so far as to conduct a vote-getting campaign for his patrons. While he shows Farmer Bill Jones how to fight the weevil or how to keep accounts he takes occasion to remark that John Smith would make an exceptionally fine county commissioner. Unethical practices of this sort are rather common in some parts of the country; in other sections they are rare. State exten-

sion directors at times attempt to remedy the situation by assigning new men to counties far from their homes, where they may be presumed to have no local political affiliations; but the remedy is not effective, for an agent soon learns who is the local boss, and acts accordingly.

The best cure for this state of affairs, when it can be obtained, is an aroused public opinion. One Mid-Western farmer, though he disapproved of extension work, vigorously denied that the county agents of his state played politics. "We wouldn't stand for it," he said. And because the people won't stand for it, it isn't done. In the absence of active popular disapproval, the most effective remedy would probably be the payment of all or a large portion of agents' salaries direct from state and federal funds, making them less dependent on local whims. Part payment from county revenues makes it necessary for even the best agents, who take no part in political feuds, to spend a considerable portion of their time justifying their work in the eyes of the men who hold the county purse strings. Partial dependence on voluntary contributions, which in at least one state exceeds the total from all other sources, is even more objectionable, for it becomes the agent's duty to see that adequate contributions are made.

One of the most pressing problems confronting the men who set in motion the extension movement during the first decade of the present century was

to find men properly qualified for positions as county agents. It was not enough that the Department of Agriculture had a message for the average farmer; men must be obtained who could carry that message to the rural communities and secure its acceptance. Dr. Seaman A. Knapp, who was chiefly responsible for the development of the county agent idea, was greatly impressed with the need for "practical" farmers. "There is no use in sending a carpenter to tell a tailor how to make a coat," he declared in 1906. "Even if he is pretty well read up on coats, the tailor won't follow. The farmer must be a recognized leader; progressive, influential, and able to carry public opinion with him."⁷

So most of the early county agents were extremely "practical," which meant that they had been farmers all their lives, and that in most cases their general education and technical training had been sadly neglected. They were earnest, well-meaning men, but they were little better informed than their neighbors as to correct agricultural practices. In many cases a year or two sufficed for the rank and file of the people to learn their message, and then their influence waned. From the very beginning higher salaries were paid in the Northern states, and there the demand was soon made for college-trained men. Gradually the "practical farmer" was supplanted

⁷ U. S. Department of Agriculture Miscellaneous Circular No. 59, p. 12.

in every section of the country by the agricultural college graduate, trained for the work. The land grant colleges hastened to add to their curricula courses designed to prepare men as county agents. Today ninety-five per cent of the county agricultural agents in the United States are college graduates, and the remaining five per cent are for the most part farmers who have been in the service fifteen years or more.⁸

The mere possession of a college diploma is not a sufficient guarantee of fitness, however. The best men seldom become county agents, and if they do they usually resign before long. Salaries are so low that persons of more than average ability are seldom attracted. The minimum salary in one state is fourteen hundred dollars, and many other states offer the new agent but little more. Over large sections of the country the county agent who achieves the distinction of a thirty-five hundred dollar salary after years of brilliant service is regarded as highly successful. The average salary for all the states is only about twenty-seven hundred dollars. There is not even the recompense of short hours. So it is not surprising that the turnover is high. In any year more than twenty per cent of the agents have been in extension work less than twelve months.

Being new to the game, they often lack tact, and

⁸ U. S. Department of Agriculture Miscellaneous Circular No. 59, p. 12.

succeed only in antagonizing the men they desire to serve. Farmers, like other people, resent the manner of the man who leaves no doubt as to his superior knowledge. It is not enough that the county agent knows the proper seed or the proper breed; he must be able to induce the farmers of his community to make practical use of his knowledge. The most successful agents assiduously avoid any appearance of pedagogy. One of the best agents in the South, when first he wished to persuade someone to use a higher type of fertilizer, would say in substance: "That stuff you are using is no good. You might as well put nothing at all on the soil." And everywhere he would leave resentment in his wake. Today he remarks: "I wonder whether that fertilizer you are using or the 10-5-3 formula would be more suitable for your land? Why not try your old fertilizer on a part of your acreage, and 10-5-3 on the remainder? Then we can find out which works better." The farmer may learn his lesson more slowly, but once he has learned it he never forgets.

In many sections of the country the belief is widespread that the county agents are putting too much emphasis on production, and too little on marketing. Marketing is one of the projects regularly included in the extension program, but there is reason to believe that occasionally it receives less attention than it deserves. "We know how to raise our crops and our animals," say the farmers; "show us how to dis-

pose of them to advantage." Sometimes they are right; more often they fail to appreciate their need for higher standards of production. In one Mid-Western state a large-scale farmer bitterly opposed extension work. "It teaches us what we already know," he complained. Months later he opened a creamery, and his cream failed to pass the state inspection tests. Many another farmer fails to appreciate and utilize the services of his county agent.

Agents will probably never be of the calibre to stamp them as leaders of their communities until salaries have been materially increased. Yet great strides have been made in the last decade. The average county agent of today is a college graduate about thirty years of age, with an office, a stenographer and adequate files, reaching by automobile the people of his community. Ten years ago the average agent was a very different type of man. Paid only twelve hundred dollars a year, he travelled about by horse and buggy, on horseback or even on foot, staying overnight where night overtook him. He had no stenographer, no typewriter, no files; and his office was in his home. He was a more mature man, perhaps forty years old, and for that reason he could better command the respect of his neighbors; but his message was simple, and often far from accurate. Frequently he little understood the latest developments in agricultural technique which he was supposed to introduce into his county. He was an

individualist, bearing his own message in his own way.

The modern agent is less a personal apostle. He has been given a thorough training at his state college in the fundamentals of agriculture, and he is expected to carry to the farmers the message of the college and of the federal government. Opportunity is given him to keep abreast of the times. In some states he is given a sabbatical year with pay; in others he is occasionally relieved of his duties to permit him to take graduate courses. The county agent is by no means dependent upon his own resources, however, for the solution of the problems that daily confront him. Every state college maintains a corps of specialists, and one or more of them may be called upon at any time to help straighten out an unusually perplexing difficulty.

The most successful agents are those who have learned how to develop local leadership. One man can hope to influence by personal contact but a small percentage of the farmers of his county in the course of a year, so if he is to reach great numbers of them at all it must be through others. In every community are intelligent, public-spirited men and women, who need only a small amount of instruction to make them valuable assistants. The problem is to arouse their interest. Already a beginning has been made. During 1924 nearly one hundred and eighty-three thousand men and women volun-

tarily joined with the paid extension forces in undertaking to improve agricultural and home practices in rural America. They acted as demonstrators, served as chairmen or members of extension committees in their communities, and gained recognition as local leaders. Among them were farmers, farm housewives, school teachers, merchants, clergymen, physicians. Some of this number were only nominal leaders, but the majority gave freely of their time and energy. A group of volunteer workers in New Jersey reported having spent on the average more than ten days of 1925 in promoting extension projects. Every year the number of local leaders increases as extension work acquires a firmer hold on the rural imagination.⁹

Nearly every state has some agricultural counties without agents; in some commonwealths more than half the counties are carrying on no extension activities. The reasons for agent-less counties are numerous. Some counties have abandoned the work after giving it a trial. Others have never been convinced of its value. A great many plead poverty. Whether an agent should be put in every rural county of the United States, regardless of local sentiment, and paid entirely from state and federal funds, is a much disputed question. Among the state

⁹ "Co-operative Extension Work, 1924," U. S. Department of Agriculture Bulletin, p. 9; "Local Leadership and the Effectiveness of Extension Work in Reaching Rural People," N. J. Extension Bulletin No. 50.

extension directors there is no unanimity of opinion. Some point out, with reason, that in counties where the land is worth but five or six dollars an acre it is useless to think of substantial local financial support, yet in such counties effective leadership is badly needed. Others contend, with equal justification, that local co-operation is the *sine qua non* of successful extension work, and that counties rich enough to support county agents but unwilling to do so are apt to be little benefited by assistance through coercion. The solution of the problem seems to be the payment of a large part—perhaps all—the salary of an agent for every county that desires to co-operate, permitting the county to show its desire by appropriating sufficient for incidental expenses. Such an arrangement works well in California and Pennsylvania. It involves a certain amount of local initiative, but places no great burden on even the poorest communities. Wealthy counties are in a position to employ two or even more agents, if they wish.

The federal government has set up for county agents definite standards from which it permits deviation only under exceptional circumstances. Every agent is supposed to have completed successfully a four-year agricultural course at a recognized college, and to have had several years of farming experience. Almost all the agents have been raised on farms, and the only ones not college graduates are

the few "practical" farmers who joined the extension service in its infancy, and are still serving their communities. The federal standards are defective in that they make no provision for successful farming experience after graduation, with the result that hundreds of young men are transformed by the presentation of diplomas from students into teachers, going out to demonstrate the fundamentals of agriculture without ever having had a chance to test their theories. The situation is analogous to turning out hundreds of young physicians as licensed practitioners before they have served as internes. The young agent becomes an old agent with only the farm experience of his boyhood, without ever having practiced what he daily teaches. The standards of a number of states are higher than those of the federal government. Illinois, for example, in addition to requiring completion of a four-year college course and "adequate" early training (the power to define "adequate" remaining in state hands), stipulates that each county agent must have had at least five years of successful agricultural experience after graduation from college. As a result, the Illinois agents are among the most successful in the country. Commensurately high salaries are paid, however, ranging from twenty-five hundred dollars to more than five thousand, with an average of about thirty-six hundred dollars. The value of agricultural extension work to rural America would doubtless be

increased many fold if the federal government were in a position to insist upon the universal adoption of the Illinois standards. But in all probability it will be unable to do so until every state adopts a salary scale approximately that of Illinois.

In 1915, the year following the passage of the Smith-Lever Act, a new bureau known as the States Relations Service was set up in the Department of Agriculture to administer extension work. It consisted of the Office of Extension Work South and the Office of Extension Work North and West. Both offices had the same philosophy based on the demonstration plan, but they followed somewhat different methods of organization and procedure.¹⁰ In 1921 they were consolidated, and the supervision of all state activities under the Smith-Lever Act was entrusted to the Office of Co-operative Extension Work. The country has been divided into four sections for administrative purposes, each section containing about twelve states. Thirteen white and two colored federal agents visit the state colleges from time to time, examining state records, auditing state accounts and making short trips into the field. The reports of these men and women, together with the formal statements of the colleges, enable the federal government to determine whether every state is entitled to its full allotment of federal funds. In ad-

¹⁰ U. S. Department of Agriculture Miscellaneous Circular No. 59, p. 7.

dition to the fifteen members of its inspectional staff, the Office of Extension Work has a group of eleven subject-matter specialists, experts in such matters as nutrition, horticulture, farm management, animal husbandry, and the like, with headquarters in Washington, who visit the states sporadically at the request of the state directors.

During the summer of 1926, forty-six of the forty-eight state extension directors were asked if the Smith-Lever Act had stimulated county agent work in their states. Without a dissenting voice they replied that it had. Indeed, the figures of growth are equally as significant as their testimony. In the decade from 1915 to 1925 the total number of counties having agricultural agents increased from about nine hundred to more than two thousand, so that at the present time two-thirds of the rural counties of the United States are receiving the benefits of extension work. During the same period the number of counties with women agents rose from less than three hundred to more than nine hundred.

Federal funds for co-operative extension work have mounted rapidly, but the growth of state and local contributions has been even more rapid. In 1915 Congressional appropriations amounted to forty-one per cent of the total from all sources; ten years later they represented but thirty-six per cent. Yet in that thirty-six per cent were included the large Smith-Lever allotments, supplementary grants

amounting to more than a million dollars annually since 1919, and an annual direct appropriation of an additional million for co-operative demonstration work. The growth of county agent funds and the sources from which they come are shown in the table on page 80.

There has been no federal domination in agricultural extension work. Forty-six state directors declare that they are permitted ample freedom in shaping their plans and policies, and that the attitude of the federal government indicates only a desire to help. The other two, apparently, have made no declaration on the subject. "Reasonable," "sensible," "intelligent," are some of the adjectives applied by state officials to federal supervision. Such unanimity of opinion is surprising. It suggests that the Office of Extension Work, in its desire to avoid the appearance of evil domination, has failed to exercise adequate supervision over state affairs. Indeed, this actually seems to be the case. Federal inspectors visit each state from one to three times a year, becoming reasonably familiar with the work; but they sanction many practices which they know should not be permitted. Violations of the letter of the Smith-Lever Act are not tolerated; such matters as failure to appropriate adequate state funds or failure to carry on legitimate extension activities are generally discovered by the federal inspectors and corrected by the states. But beyond the letter of

GROWTH OF FUNDS FOR CO-OPERATIVE AGRICULTURAL
EXTENSION WORK, BY SOURCES ¹¹

Year	U. S. DEPARTMENT OF AGRICULTURE		SMITH-LEVER	
	Farmers' Co-operative Demonstration Work	Other Bureaus	Federal	State
1915	\$905,782.00	\$105,168.40	\$474,934.73	
1916	900,389.92	165,172.01	1,077,923.73	\$597,923.73
1917	958,333.87	185,893.15	1,575,054.38	1,095,054.38
1918	3,900,406.30*	507,282.95	2,068,066.29	1,588,066.29
1919	5,564,839.70*	935,373.64	2,538,828.04	2,058,828.04
1920	1,021,091.39	406,020.96	4,464,344.36	3,981,344.36
1921	1,025,083.33	435,046.70	4,974,048.50	4,494,048.50
1922	1,007,263.48	209,540.93	5,510,349.45	5,030,349.45
1923	1,004,729.29	275,532.24	5,820,816.89	5,340,816.29
1924	991,900.82	234,320.98	5,859,605.01	5,379,605.01
1925	962,390.34	228,856.67	5,879,083.89	5,399,083.89
1926	967,166.73	120,377.72	5,879,183.10	5,399,183.10
Year	State and College	County	Other	Total
1915	\$1,044,270.38	\$780,331.79	\$286,748.55	\$3,597,235.85
1916	872,733.90	973,251.56	276,786.09	4,864,180.94
1917	832,114.16	1,258,296.14	244,873.55	6,149,619.63
1918	881,091.25	1,863,632.29	494,219.38	11,302,764.75
1919	901,828.49	2,291,209.30	370,653.29	14,661,560.50
1920	1,244,465.72	2,865,739.87	672,073.26	14,658,079.92
1921	1,549,897.30	3,293,566.38	1,020,557.61	16,792,248.32
1922	1,497,379.71	2,972,740.71	954,127.91	17,181,751.64
1923	1,712,766.53	3,420,000.81	910,182.35	18,484,845.00
1924	1,696,878.21	3,883,185.02	1,036,529.99	19,082,025.04
1925	1,978,746.89	3,893,814.16	990,395.56	19,332,371.40
1926	2,113,369.94	3,996,614.08	1,036,557.46	19,485,492.81

* Includes emergency funds.

† Funds from other bureaus included in this column prior to 1926.

¹¹ Figures supplied by the Office of Co-operative Extension Work of the Department of Agriculture.

the law the Office of Extension Work seldom ventures. It seems to have adopted a *laissez-faire* attitude with regard to matters of state policy. Any state complying with minimum statutory requirements is virtually certain to receive federal funds. Federal officials will suggest changes and point out possible improvements, but they will not withhold state allotments for anything short of actual statutory violations. More than that, their inspection is rather superficial. In an earlier chapter it was pointed out that every bureau administering a subsidy law must choose between close and cursory supervision, must risk the charge of domination or the charge of laxity. Consciously or unconsciously, the Office of Co-operative Extension Work has adopted a policy of supervision bordering on laxity.

The task of federal inspection naturally divides itself into two parts—examining state projects and auditing state accounts. Adequate inspection of state field activities requires trained extension workers; proper auditing of state accounts calls for trained auditors. It is next to impossible to find men and women fully competent to handle both phases of inspection, so instead of employing two sets of supervisors, as done by the Children's Bureau with considerable success,¹² the Office of Extension Work uses expert extension workers, relying on them to audit state accounts as best they can.

¹² Cf. *infra*, ch. 9.

In most cases their best is none too good. They satisfy themselves in a general way that state records show expenditures for purposes permitted by law. Beyond that they do not and can not go.

It must not be thought, however, that the *laissez-faire* policy of the Office of Co-operative Extension Work has resulted in a dearth of accomplishment. On the contrary, the states have been stimulated by federal aid to remarkable records of achievement. It is undoubtedly true that in many states no amount of closer federal supervision could have produced more satisfactory results, so smoothly are the state organizations functioning. But in other commonwealths there is much to be desired. The differences between the best states and the worst probably would not be so pronounced if the hand of the federal government pressed more tightly upon the guiding reins.

The only real test of the effectiveness of extension work is the percentage of farms and farm homes adopting improved practices because of the effect, direct or indirect, of extension teaching. Studies have been made by the Office of Extension Work, in co-operation with state directors, to determine the actual percentages. According to the formal statements made in various federal bulletins, sections of typical counties have been picked out in typical states, and house to house canvasses made to learn from the lips of farmers and their wives what they

have gained from county agent activities. The federal people freely admit, however, that some better-than-average counties have been selected. More than one state director, anxious to make a good showing, has chosen sections in which extension work has been long established, in which there have been few changes of state personnel, and in which he has known that general satisfaction existed.

Nearly seven thousand farms were visited in eighteen counties of eight states, situated in every section of the country. From seventy-five per cent of the farms came reports of the adoption of improved practices as the result of extension work. The average number of changed practices reported was in excess of three per farm. More commonly they were agricultural instead of home practices—not a surprising state of affairs, for home economics agents are far less numerous than county agricultural agents, and in most counties have been employed a much shorter time.¹³

Seventy-five per cent is a very high figure. Though accurate for the counties in which the studies were made, it is doubtless much too high to be accepted as an average for the country. For all rural counties in which extension work is now carried on, the percentage of farms influenced to the

¹³ Bulletin No. 319, Georgia State College of Agriculture, 1926; Extension Circular No. 221, College of Agriculture, University of Arkansas; Extension Bulletin No. 50, New Jersey State College of Agriculture; U. S. Department of Agriculture Bulletin No. 1384.

extent of changing their modes of living and working is probably about forty. It varies from ten per cent in some parts of the country to eighty or even eighty-five per cent in other sections. These figures are the composite judgment of thousands of persons best qualified to decide—state directors of extension work, county agents, representatives of agricultural associations and small-town chambers of commerce, leading farmers and rural merchants in every section of the United States. In so far as they are accurate, they indicate that extension work is a vital force in American rural life. Remarkable progress has been made since the movement was first begun. The chief task remaining is to bring the poorest states up to the level of the best.

CHAPTER V

HIGHWAYS

UNTIL the closing days of the nineteenth century the counties or equivalent units of government had full jurisdiction over the construction and maintenance of highways within their borders. The care of the roads had long been regarded as a purely local function. There was no reason why it should have been regarded otherwise, for highways served purely local needs. Farmers wishing to visit neighbors or to transport their goods to nearby markets used the highways. At one time, people travelling long distances went by stagecoach, and also used the highways. But after the advent of the railroad they relied on steam transportation for their longer journeys. Roads were only a matter of local interest, and were treated as such.

Then came the bicycle. People travelled over the highways more than ever before. On Sundays city folk took all-day rides into the country, and for the first time the condition of rural roads began to interest them. The demand arose for a measure of state control over road construction, and for the establishment of at least minimum standards on the main

thoroughfares. New Jersey was the first state to respond to the popular demand. In 1891 it passed a law which suggested the possibility of state control, but did little more. Under its terms full control of the highways remained in county hands, but a state engineering department was set up, employing skilled engineers capable of advising the local officials. Counties inviting state participation were entitled to receive suggestions and criticism from the state department, but the responsibility for letting contracts and maintaining the roads still rested with the local authorities. The state agreed to pay one-third of the cost of all highways built under its supervision.

This first attempt to establish the principle of state aid for road construction soon led to other and more thoroughgoing ventures. The New England and Middle Atlantic states, together with California, Delaware, Maryland and North Carolina, were quick to follow New Jersey's lead. In nearly every state the policy took a somewhat different form. Some legislatures merely offered the counties advice; some offered them money; while still others made state participation mandatory. It came to be realized in time that complete control of the main thoroughfares must be vested in state hands, and gradually this arrangement was made in the more progressive states.¹

¹ 1924 Yearbook of the U. S. Department of Agriculture, pp. 97-8.

Meanwhile, the advent of the automobile had multiplied manyfold the users of the highways, and had strengthened the demand for some form of state aid in every section of the country. By 1910 many of the Southern and Western states had established state highway departments, with varying degrees of authority. But highway transportation had begun to manifest itself as a national problem. The long journey of another day had become a short trip; for most practical purposes state lines had been obliterated. So bills were introduced in Congress providing for federal participation in road construction. During 1912 sixty-two such proposed measures made their appearance, and all went down to defeat.

Some of these bills, supported by the representatives of the automobilists and the advocates of military preparedness, provided for the construction and maintenance by the federal government of a vast system of highways running from state to state and uniting all parts of the country. Other bills, favored by the rural groups, fixed their attention upon the construction of relatively short branch lines leading out from thousands of local centers. The farmers desired, for the most part, to have the federal grant made unconditionally, leaving the states free to construct and maintain public roads in accordance with their own judgment.

At last a majority of the members of the House were induced to agree upon a plan submitted by

Congressman D. W. Shackelford, of Missouri. This proposal, which was attached to the Post Office Appropriation Bill by a vote of two hundred and forty to forty-nine, was a distinct triumph for the localists. It divided the rural post roads of the country into three classes according to the type of construction, and provided that the federal government should pay the states for the privilege of using these roads to deliver rural mail. Twenty-five dollars a year was to be paid for each mile of Class A road so used, twenty dollars for each mile of Class B and fifteen for each mile of Class C. The roads in the third class, mostly of dirt, comprised five-sixths of the total mileage.

The bill was vitally defective in a number of respects, as pointed out by Dr. Paul H. Douglas in an excellent article.² Its purpose was not road construction, but road rental. Roads of the highest type cost thousands of dollars per mile to build; some cost annually thousands per mile to maintain. Even the construction and maintenance of dirt roads is expensive. The sums offered the states were totally inadequate to provide for needed repairs, without considering construction. A still more serious defect was the total absence of federal supervision. The states were to be given money, and permitted to use it as they saw fit. Everyone knew or ought to have known what would be the result. The more progress-

² "Political Science Quarterly," v. 35, p. 261 *et seq.*

ive states would use it, while it lasted, to aid in fostering state-wide systems of well-planned, well-built and well-preserved highways; the others would use it for poorly planned and poorly executed highways, if they used it for roads at all.

Fortunately, the Shackleford plan never became law. It died a natural death in conference committee, but this did not discourage Mr. Shackleford. In 1914 he introduced another road subsidy bill. The new measure was considerably better than its predecessor. Instead of a mere bagatelle it offered the states twenty-five million dollars, sixty-five thousand to each state, and the remainder distributed in part on the basis of population and in part on the basis of rural post road mileage. But national supervision was still reduced to a minimum. Again the measure passed the House, and again it was rejected by the Senate. Undaunted, Congressman Shackleford made a third attempt in 1916. This bill carried with it a twenty-five million dollar appropriation and provision for increased federal control, but its essentially local character was revealed by the specific statement that one of its purposes was "to encourage and promote a genuine system of roads leading from cities, towns and railway stations into the adjacent farming communities." The measure went the way of all Shackleford subsidy proposals—a House victory and a Senate defeat. In the meantime, Senator Bankhead of Alabama had introduced

a bill framed by the National Association of Highway Engineers, and this was substituted for the House bill. In the conference committee the House receded from its stand, and on July eleventh, 1916, the Bankhead plan became law.³

The Federal Aid Road Act of 1916 was a distinct triumph for those favoring a national system of highways under national supervision. Several times amended, it has been a vital factor in unifying the road systems of the several states. Provision was made for a five-year appropriation increasing annually until 1921, when a maximum of twenty-five million dollars was to be reached. The maximum has since been increased and increased again, so that the annual appropriation is now seventy-five million dollars.⁴ The Secretary of Agriculture was directed to expend the money, in co-operation with the highway departments of the several states, in the construction of rural post roads. Just why federal co-operation was limited to "post roads" is difficult to say. Perhaps it was thought best to allay any possible suspicion as to the constitutionality of the act. At any rate, "post road" was defined so broadly as to leave the federal government unhampered. The term was declared to mean "any public road over which the United States mails now are *or may hereafter be transported.*" In 1921 the

³ Douglas, Paul H., *op. cit.*, pp. 262-6.

⁴ 39 Stat. L. 355; 40 Stat. L. 1200; 42 Stat. L. 212, 660, 1157, 1321; 43 Stat. L. 212.

phrase "post road" was dropped altogether, the grant of that year being made "for the construction of highways."⁵

The 1916 act provided that only "substantial" roads should be built with federal funds; later amendments more specifically stipulated that "only such durable types of surface and kinds of material shall be adopted for the construction and reconstruction of any highway . . . as will adequately meet the existing and probable future traffic needs and conditions thereon."⁶ Since the federal government was made the judge of whether these conditions were being fulfilled, the use of proper materials was assured.

Construction, reconstruction and improvement of highways were to be financed in part with federal funds; but maintenance, including the making of needed repairs and the preservation of reasonably smooth surfaces, was made a direct obligation of the states, which they must fulfill in order to receive federal allotments. The law of 1916 provided that "if at any time the Secretary of Agriculture shall find that any road in any State constructed under the provisions of this Act is not being properly maintained he shall give notice of such fact to the highway department of such State and if within four months from the receipt of said notice said road has not been put in a proper condition of maintenance

⁵ 42 Stat. L. 212.

⁶ *Ibid.*

then the Secretary of Agriculture shall thereafter refuse to approve any project for road construction in said state, or the civil subdivision thereof, as the fact may be, whose duty it is to maintain said road, until it has been put in a condition of proper maintenance.”⁷ Here was a real weapon for federal administrators, enabling them to enforce federal maintenance requirements effectively. A subsequent amendment strengthened the hand of the federal government still more by authorizing the Secretary of Agriculture, after duly notifying a state that a road was suffering for lack of care, and waiting ninety days without avail for state action, to make suitable arrangements for maintaining the road, charging the cost against the federal funds allotted to the state. The refunding of this money from state sources was made a condition precedent to resumption of federal co-operation.⁸

A somewhat complicated method of apportioning the federal highway subsidy has been devised. The grant is distributed “one-third in the ratio which the area of each state bears to the area of all the states; one-third in the ratio which the population of each state bears to the total population of all the states, as shown by the latest available federal census; one-third in the ratio which the mileage of rural delivery routes and star routes in each state bears

⁷ 39 Stat. L. 355.

⁸ 42 Stat. L. 212.

to the total mileage of rural delivery routes and star routes in all the states.”

As usual, the Act of 1916 required each state desiring federal aid to accept the terms of the federal offer through its legislature, though temporary gubernatorial acceptance was permitted. This subsidy act went further than any previous federal aid legislation in prescribing the exact manner of spending federal allotments. Each co-operating state was directed to submit to the Secretary of Agriculture, through its highway department, project statements setting forth the proposed construction of rural post roads within its borders, including all surveys, plans, specifications and estimates required by the Secretary. Projects meeting all federal requirements were to be approved by the Secretary of Agriculture, and Federal allotments paid as construction proceeded, all work being done under the supervision of the state highway department, subject to the inspection and approval of the general government.⁹

The administration of the Federal Highways Acts has been entrusted to the Bureau of Public Roads. The actual work of supervision is in charge of a chief engineer, with headquarters in Washington. For administrative purposes the country has been divided into eleven districts; and in each is a district engineer, authorized to deal with state highway de-

⁹ 39 Stat. L. 355.

partments and to make many final decisions. Questions of policy and other important matters are referred to Washington for final action. Under each district engineer are several state engineers, the number varying with the number of states in a district. Each state engineer is directly responsible for conditions within his jurisdiction. He has one or more trained engineers—in some states as many as six—to aid him. The four districts comprising the states of the Far West have been grouped together in what is termed a “region,” presided over by a deputy chief engineer, with headquarters in San Francisco. Many matters which the district engineers of the Central and Eastern Districts must refer to Washington for final action are settled at San Francisco for the Western states. The San Francisco regional office was established to reduce the time necessary for final approval of the projects of the Mountain and Coast states.

Conforming to the procedure provided for by law, each state desiring federal aid in constructing a section of highway submits to the Bureau of Public Roads a project statement containing a vast amount of detailed information—the exact route of the project, the nature of the proposed construction, type of paving, grades, estimated cost, and the like. Ordinarily the district engineer has full authority to approve any project tentatively and to tell a state to proceed with construction; sometimes a question of

policy makes it necessary or expedient for him first to refer the matter to Washington. Federal officials deal only with the state authorities, and not with the contractors who do the actual work of construction. It is customary, however, for a representative of the Bureau of Public Roads to be present whenever bids are considered for construction on which federal money is to be spent, and to pass on the acceptability of the bids submitted. Refusal by the federal engineer to approve a bid does not prevent the state from accepting it; but as federal money will be forthcoming only for approved bids, the arrangement is equivalent to federal examination of all bids submitted before final state action is taken.

Federal approval of a project indicates that an amount sufficient to cover the federal government's share of construction will be released to the state upon successful completion of the project. The state bears the initial cost, and is reimbursed only after the finished job has been inspected and approved by a federal engineer. Needless to say, the Bureau of Public Roads makes no attempt to stipulate that only roads of a certain type or types may be constructed with federal funds. The kinds of construction are as diverse as the needs of the different sections of the country, though certain standard engineering practices are required. Every project has to be considered separately on its own merits. A number of factors affect the decisions of the district

engineer and of the central authorities at Washington. The amount and nature of the present and probable future traffic on the highway are taken into account, as well as the type of adjacent roads and the relation to the highway system. Peculiar local conditions are also considered, such as the prevailing local practice in road construction and the kind of local materials readily available. In every instance federal engineers insist upon the building of suitable roads, but "suitable" does not have the same meaning in Oklahoma and Massachusetts.

Federal inspection of federal aid roads does not cease when the stamp of federal approval has been placed upon the original construction, but continues as long as the roads last, to ascertain whether the states are complying with maintenance requirements. More than seven thousand federal aid projects have now been completed, involving fifty-six thousand miles of highways,¹⁰ and every mile requires periodical examination. Two inspections a year are made of all projects by the field forces, and detailed written reports are prepared stating their condition. Copies of these reports are sent to Washington, where the project statements labelled "unsatisfactory" are segregated from the others, and notification sent to the delinquent states. Usually such a notice is sufficient. Once in a while, however, states persist in their negligence, and more

¹⁰ As of November 1st, 1926.

drastic action becomes necessary. Occasionally the Bureau of Public Roads has even been obliged to withhold for a time all federal aid from a state in order to force upon it a sense of its responsibility. But such instances are rare. The number of projects marked as unsatisfactory seldom aggregates more than three per cent of the total.¹¹

Federal inspection of state road construction and maintenance is thorough and adequate. By no stretch of the imagination could the terms "nominal," " cursory," or "lax" be applied to it, as they might well be to federal supervision under most of the subsidy laws. In fact, the highway subsidy is administered more carefully, more thoroughly and more completely than any other form of federal aid. Nearly all the other bureaus administering subsidy laws inspect the work of the states by the "sampling" method. Their representatives visit state headquarters, and from there go to see "typical" vocational schools, "typical" farm demonstrations, and the like, carefully selected by state directors so as to give the most favorable impressions. The samples are all hand-picked. The Bureau of Public Roads, however, depends on no samples. Its representatives visit regularly every project in which federal money has been invested, instead of deter-

¹¹ Hearings before the Committee on Roads, House of Representatives, 69th Congress, 1st Session, Feb. 15-20, 1926, pp. 161, 163; Report of the Chief of the Bureau of Public Roads, 1920, pp. 7-8; "American Highways," v. 5, no. 2, Apr., 1926, p. 28.

mining the condition of all roads by riding over a few. Such an arrangement is feasible in the case of the highway subsidy because of the large amount of federal funds involved. It costs a million and a half annually to secure adequate inspection of fifty-six thousand miles of road, but that sum is only about two per cent of the amount paid to the states each year for highway construction. Two per cent for administration is a very reasonable figure. Other bureaus employing the "sampling" method spend considerably more than two per cent, and then find their resources limited. But their four or five per cent may mean thirty or forty thousand dollars, as compared with the million and a half represented by the Bureau of Public Roads' two per cent. Since the highway subsidy is considerably larger than all the other grants combined,¹² it is easier to secure from Congress the funds necessary for adequate administration. The differences between the administrative methods of the Bureau of Public Roads and of some of the other federal bureaus are by no means due entirely to differences in Congressional appropriations, however. On the contrary, some federal bureaus have deliberately adopted a policy of *laissez-faire*, just as the Bureau of Public Roads has deliberately embarked upon a policy of intensive inspections. It is significant that the federal bureau which comes nearest, perhaps, to using the intensive

¹² Cf. *supra*, p. 6.

methods of the federal highway officials is the Forest Service, which administers the smallest of all the federal grants.

When the first Federal Aid Road Act was passed in 1916, sixteen states had no functioning highway departments. Road construction and maintenance, if any, were entirely in the hands of the counties. The new subsidy law authorized the Secretary of Agriculture to co-operate with *state highway departments*, and made necessary at least some appearance of central authority within each state. A number of commonwealths accepted the federal offer, intending to furnish the very minimum of staff and equipment. In more than one state, during the years 1917 and 1918, the state highway department consisted of a chief engineer and a stenographer. The chief engineer and the stenographer had about equal authority over county road building. The Bureau of Public Roads brought what pressure it could to secure properly functioning state highway departments with adequate authority, and in 1921 its hand was greatly strengthened by the Highways Act of that year, which defined a state highway department as any "State department, commission, board or official having adequate powers and suitably equipped and organized to discharge to the satisfaction of the Secretary of Agriculture the duties herein required."¹³ In a number of states, conditions are

¹³ 42 Stat. L. 212.

still far from satisfactory. Too large a measure of control over through thoroughfares remains in the hands of county authorities.¹⁴ But the improvement since the early days of federal co-operation has been marked.

The 1916 act restricted the federal contribution to ten thousand dollars for each mile of highway constructed, except in the case of bridges having certain dimensions. This was later increased to twenty thousand dollars a mile, and by a subsequent amendment reduced to fifteen thousand. In many states the limitation has no practical significance. Fifteen thousand dollars a mile from the federal government is quite adequate. But some of the New England and Middle Atlantic state highway departments feel that the restriction is burdensome. Their roads often cost many times fifteen thousand dollars. The average construction cost of New York State's through highways is fifty-five thousand dollars a mile, and some of its finest thoroughfares cost more than one hundred thousand. Removal of the fifteen thousand dollar limitation would not increase the allotments to New York, Pennsylvania, Massachusetts and other states, but would enable them to concentrate federal aid on fewer projects. In other words, they would be free from federal supervision on a larger percentage of their road mileage. A bill has been introduced in Congress to effect this

¹⁴ Cf. *infra*, p. 118.

change. In strict theory it is indefensible, because it limits federal authority and permits the states to set their own standards in building many miles of roads that would otherwise require federal approval. Its practical effect probably would not be very great, however, because the states affected by the amendment have high standards of construction, and are not likely to lower them. Most of the commonwealths whose standards have been materially raised by federal inspection and guidance are not building forty or fifty thousand dollar a mile roads.

Federal participation in highway construction was also limited by the act of 1916 to fifty per cent of the total cost of any project. This restriction, though reasonable for most sections of the country, bore heavily upon the public land states, with their sparse populations and large areas of non-taxable federal lands. So in 1921 the limitation was removed for states containing large portions of the public domain, and in its place was substituted a sliding scale which made the maximum percentage of federal participation dependent upon the area of federal lands within a state.¹⁵ This arrangement applied to ten states. It raised the federal maximum to eighty-seven per cent in Nevada; in the other nine states

¹⁵ "In the case of any State containing unappropriated public lands exceeding 5 per centum of the total area of all lands in the State, the share of the United States payable under this Act . . . shall not exceed 50 per centum . . . plus a percentage . . . equal to one-half of the percentage which the area of the unappropriated public lands in such State bears to the total area of such State."—42 Stat. L. 212.

the increase was not so large.¹⁶ It may well be that the greatest benefit has not been derived by the states directly affected, but by the states to the east and west of them. In the Rocky Mountain region, federal funds are used almost entirely for the construction of main thoroughfares, and not for "farm-to-market" roads. They go to build highways which form important links in great interstate chains. Such is the Wendover Cut-Off, completed in 1925, which extends westward from Salt Lake City to the Nevada line across the Great Salt Lake Desert. This road, passing through a section of practically uninhabited wilderness, would in all probability have remained unbuilt for years to come but for federal initiative and substantial federal assistance. Yet it is the most difficult and almost the last section of the most direct highway connection between the east and west coasts. The federal government paid practically seventy-five per cent of the entire cost.¹⁷

The act of 1921 made a decided advance over its predecessors by stipulating that federal allotments and the state funds which matched them must be expended in each state upon a definite connected system of roads limited to seven per cent of its total road mileage. In order to carry out this provision the Chief of the Bureau of Public Roads conferred with the highway engineers of the several states, and

¹⁶ "Public Roads," Dec., 1921.

¹⁷ Report of the Chief of the Bureau of Public Roads, 1925, p. 7.

co-ordinated the roads selected by them into a system to be known as the federal aid system. This network of roads, with a total length in excess of one hundred and eighty-four thousand miles, reaches directly practically every city with a population of not less than five thousand. If zones ten miles wide were marked off on each side of the highways chosen, these zones would include the homes of ninety per cent of the population. Federal funds may be used to construct other roads within a state only after the seven per cent system has been completed.¹⁸

Having already stimulated highway construction by authorizing in 1916 the payment of large sums from the federal treasury to the states, Congress provided an additional stimulus three years later by directing the Secretary of War "to transfer to the Secretary of Agriculture all available war material, equipment and supplies not needed for the purposes of the War Department, but suitable for use in the improvement of highways," to be distributed among the several states for use "on roads constructed in whole or in part by federal aid, such distribution to be made upon a value basis" similar to that prescribed for the apportionment of federal funds.¹⁹ Under the provisions of this section a representative of the Bureau of Public Roads was sent to France in the summer of 1919 to assist in the

¹⁸ Yearbook of the Department of Agriculture, 1924, p. 103.

¹⁹ 40 Stat. L. 1200.

selection of machinery and equipment suitable for road building.²⁰ Distributions of material were made to the states before the end of the year, proving of great value to them at a time when highway construction was almost at its nadir. Supplemental acts directed more specifically the transfer of motor vehicles and other equipment to the states, and by the first of July, 1927, the value of the total allotments under these statutes had amounted to two hundred and twenty-four millions of dollars.²¹ Trucks and tractors were the most important items, but the material distributed was as various as the needs of road construction under the wide range of natural conditions existing in the United States. Millions of pounds of TNT intended for use in warfare were allotted to the state highway departments, as well as huge bombproof tents. These "elephant shelters" are being employed in the mountains of Colorado as snow protectors and in the deserts of Arizona as large culverts to shield the roads from the effects of the heavy storms which infrequently visit the region.

The Bureau of Public Roads is free from partisan politics. Its chief, formerly state highway engineer of Iowa, was chosen to head the federal bureau because he was generally conceded to be one of the two outstanding highway engineers of the country. His subordinates have likewise been chosen without

²⁰ Report of the Chief of the Bureau of Public Roads, 1920.

²¹ Figures supplied by the Bureau of Public Roads.

regard to party affiliations. State projects are approved or rejected without regard to their effect on local politics. As might well be expected, however, politics are rampant in many of the state highway departments. The spoils are very tempting. In a number of commonwealths, highway department payrolls are padded with incompetents. Conditions of this sort the Bureau of Public Roads is powerless to prevent. It never asks for the removal of an incompetent state engineer, though sometimes it requests that a particularly unsatisfactory employee be transferred to work not involving federal cooperation. Matters of policy also are affected, and in such instances the federal officials are sometimes able to take a hand. Not infrequently it happens that one of three possible routes may be chosen for a new road, and that a county commissioner or other person of local importance lives near the least desirable route. Under such circumstances, the sequence of events is apt to be: first, recommendation of the best route by the state engineer; second, selection of the poorest course by the state board of highway commissioners, often a group of men chosen for political reasons; third, refusal by the federal engineer to approve the unsuitable project; fourth, grudging acceptance of the best route by the state board. Many a hard-pressed state highway engineer welcomes the federal support which alone prevents his recommendations from being consistently over-

ruled.²² Conditions of this sort are limited to certain states, of course, and are not typical of the entire country. In many of the wealthier commonwealths federal aid is so much less than state expenditures that it represents only a drop in the bucket of highway appropriations. The routes of the main highways have long been fixed in most of the New England and Middle Atlantic states, and opportunity no longer exists for political maneuvering in their selection. Some other states with main thoroughfares still in the making have competent administrative officials unhampered by partisan considerations. But there is no doubt that in a number of states, probably as many as twenty, highway construction and maintenance suffer from political manipulations, and would suffer still more but for the watchfulness of federal officials. Occasionally, though infrequently, the Bureau of Public Roads has found it necessary to go so far as to withhold from a state further allotments until it would agree to meet its obligations in a satisfactory manner. Federal funds have been withheld because of inadequate highway department organization, and because of failure properly to maintain roads constructed in part with federal funds.

Withdrawal of federal co-operation is the most potent weapon in the arsenal of the federal bureau, and is used only as a last resort. Federal officials

²² *Cf. supra*, p. 11.

waited three years after receiving reports of maladministration in one Mid-Western state before finally withholding further allotments. In the meantime, the people in some of the rural sections had become so incensed that they threatened their local officials with shotguns and other available weapons. The investigation of a federal representative disclosed a sorry state of affairs. Assessments for road construction were inequitable, and in many instances were so high as to be practically confiscatory. Contracts highly unfavorable to the state had been entered into. Federal funds labelled "for construction purposes" were going to pay the salaries of state employees. Repeated warnings from the Bureau of Public Roads were without avail. So federal co-operation was withdrawn. The reason assigned was lack of proper maintenance, and there is no doubt that many of the roads were badly in need of repairs; but any one of a half dozen other reasons might equally well have been given. The withdrawal of federal aid had the desired effect. Conditions were soon materially improved, and relations resumed. This whole affair had assumed the proportions of a public scandal. Anything less would scarcely have roused the Bureau of Public Roads to such drastic action. It is very loath to cut off federal funds entirely from a state, though it has no hesitancy in rejecting specific projects. This is a wise policy. The withholding of state allotments

would undoubtedly lose much of its effect if practiced too frequently. Usually it is possible to remedy unsatisfactory conditions by giving a friendly warning, or at least by threatening to cut off funds. The average state is very anxious not to forfeit its allotment. In 1923, for example, a bill was introduced in the legislature of one of the Southern states designed to turn the highway department into a political machine. Evidently fearful of the effect which the passage of this measure might have on federal co-operation, the Chairman of the House Committee on Public Highways dispatched a copy to Washington with the request that the Chief of the Bureau of Public Roads, Mr. Thomas H. MacDonald, examine it and give his opinion as to the continuance of federal aid should the bill be enacted into law. Mr. MacDonald replied at once: "If this measure should become the State highway law of the State of ———, I would without hesitation recommend to the Secretary of Agriculture the discontinuance of Federal participation in road building in the State of ———." The bill never became law. In numerous other instances a word of warning has sufficed to prevent the severing of friendly relations.

At present every state is co-operating with the federal government under the various Highways Acts, and only one has ever refused to accept its share of federal aid. That one is Montana, which

failed to match federal funds in 1925, and thereby lost six hundred and fifty thousand dollars. It was a time of industrial depression throughout the state, and the rank and file were in a mood to welcome any immediate reduction in state expenditures, however costly it might ultimately prove. Many persons declared that Montana could actually build roads more cheaply without federal aid than with it, and believed what they said. They felt that federal standards were unreasonably high, and were bringing about the construction of unnecessarily fine highways at extravagant figures. The engineers knew better, of course, but their voices were lost in the general din. The Assistant Chief Engineer of Montana's Highway Department expressed the sentiment of the better informed elements in the state when he said: "The federal specifications are not at all unreasonable. The people who talk about unnecessarily high standards are used to cheaply and poorly built roads—roads that cost little to build, but a fortune to maintain. Such people don't realize that by building cheap roads they are losing a great deal of money." But people were in no mood to listen. Charges had been made freely of excessive overhead, of time lost in surveying and re-surveying; and these charges received wide credence. So federal aid was lost.

It was not long, however, before the public experienced a change of heart. The Montana Automobile

Association sponsored an initiative measure providing for the resumption of state co-operation with the federal government, and this bill was supported by chambers of commerce and other business organizations, by the state federation of labor, and by nearly every daily newspaper. In order to forestall any further charges of excessive overhead costs, the measure specifically limited expenditures for administrative purposes to eight per cent. The state highway authorities had previously estimated that four per cent would be adequate, so there was no likelihood that they would be handicapped. The bill was voted on at the November election of 1926, and became law by the largest majority ever accorded an initiative measure in the history of the state—a vote of more than three to one. And so the only state which ever refused federal aid for highways speedily repented of its action.

Since the passage of the first Federal Aid Road Act in 1916 the mileage of surfaced roads in the United States has practically doubled, and the improvement in types of construction has been still more remarkable. The number of states with improved highways stretching from border to border has increased from five to twenty-five. Federal aid has been used in building fifty-six thousand miles of road.²⁵ The federal expenditures have increased

²⁵ Address of Secretary of Agriculture Wm. M. Jardine, before the Annual Meeting of the American Association of State Highway Officials, Pinehurst, N. C., Nov. 9th, 1926.

by leaps and bounds. In 1918 less than half a million dollars were paid from the federal treasury to the states for highway construction; the amount paid in 1927 was in excess of eighty-one millions. Yet the states themselves are spending each year more than five times the amount of the federal subsidy, and since the passage of the first Federal Aid Road Act have built a greater mileage of roads without federal co-operation than with it.²⁴

Federal aid, of course, has been only a minor factor in this tremendous development. The automobile has been primarily and directly responsible. But there can be little doubt that the federal subsidy has stimulated road construction in many states, and that it has brought about improved practices in nearly all states. What would have happened had the states been left to their own devices is to some extent a matter of conjecture, but the opinion of the state highway engineers may be regarded as strong if not conclusive evidence. During the summer of 1926 the highway engineers of forty-one states were asked if federal funds had stimulated road building within their respective jurisdictions. Nine replied in the negative, one was uncertain, and the other thirty-one stated unqualifiedly that construction would have proceeded more slowly but for the incentive of the federal offer. Those from several of the Rocky Mountain states and from some sections of the South

²⁴ Figures supplied by Bureau of Public Roads.

were particularly emphatic. With phraseology that varied but slightly, they declared that in their states the building of highways—particularly main thoroughfares—would have been practically impossible without federal aid.

Still more significant, however, is the manner in which the highway subsidy has raised state standards of construction and maintenance. Twenty-seven of the forty-one state highway engineers whose opinions were asked said definitely that they were building better roads because of federal co-operation. Declared one: "Federal supervision has undoubtedly strengthened the hands of the weaker state highway departments, and has enabled them to secure a higher standard of highway construction than they could possibly have secured without it."

Particularly significant is the statement of the chief highway engineer of an Eastern state. "Ten years ago," he said, "when we first began to co-operate with the federal authorities, we thought they were too exacting. We believed that we could build roads to meet our needs more cheaply without federal aid than with it. But we were wrong. Our roads would not have stood up under the strain of greatly increased traffic. The federal engineers saw ten years ahead." Yet in Montana, and doubtless in many other sparsely settled states, there are still people who believe that for them federal aid is a losing proposition.

Since the inception of the federal program the states have learned a great deal about working together in planning their arterial highways, exchanging information concerning improved practices, and numerous other matters. The American Association of State Highway Officials, formed in 1914, has become a powerful organization. Only a few years ago instances were common of parallel highways crossing state boundaries, one state improving one of the roads to its border, while the other state improved the other road to its boundary. Fortunately, such examples of failure to co-operate are becoming increasingly rare.

An indirect result of federal aid has been the preparation of standard road markers, indicating "caution," "narrow bridge," "stop," and the like, to be used, it is hoped, in every state of the Union. In 1924 the American Association of State Highway Officials, at its annual convention, passed a resolution requesting the Secretary of Agriculture to appoint a joint board of the Association and the Bureau of Public Roads to consider the adoption of uniform road signals and route numberings. This board, consisting of three representatives of the federal Bureau and twenty-one state engineers, devised suitable markers and also prepared a system of route numbers for interstate and transcontinental lines. By February, 1927, this report, somewhat modified by the Executive Committee of the Ameri-

can Association of State Highway Officials, had received the formal or informal approval of forty-two states. In time, all forty-eight will doubtless give their assent. It will then be possible for a motorist to travel from New York to California, or from Florida to Maine, following one route number the entire distance. And on whatever part of the highway he may be, the warning signals placed for his convenience will be uniform.²⁵

It has already been suggested that any federal bureau which attempts more than nominal supervision of state activities under a subsidy law is apt to be charged with meddling. The fact that the Bureau of Public Roads has been able to inspect every project involving federal aid and to raise state standards of performance without giving the impression of trying to dominate is an indication of the efficiency and tact of its personnel. The forty-one state highway engineers referred to above were asked if federal officials ever interfered unreasonably with their plans and policies. Two replied in the affirmative. "Perhaps, in a few instances, though not as a general rule," said three others. The remaining thirty-six declared that federal domination of state highway departments was a product of the imagination. "I cannot recall a single instance," declared the chief highway engineer of a Mid-Western state, "in

²⁵ Hearings before the Committee on Roads, House of Representatives, 69th Congress, 1st Session, Feb. 15-20, 1926, pp. 43-9.

which the federal government forced us to do anything that did not ultimately turn out to be for the best interests of everybody." Illustrative of the attitude of state highway officials throughout the country is the testimony of Mr. Frank Page, Chairman of the State Highway Commission of North Carolina and President of the American Association of State Highway Officials, before the Committee on Roads of the House of Representatives.²⁶

MR. PAGE: "Speaking for one State in the Union, North Carolina, during the last six years we have expended one hundred million dollars upon our road system; . . . and during that period we have collected from the Federal Government about five million dollars. . . . Yet, I say to you that that one hundred million would not have been expended in the State of North Carolina had it not been for the expenditure of the five million dollars provided by the Federal Government. It served as a continued incentive to our own people and to the legislature in making provision for additional money for road improvements. I also want to say to you that the money we have expended would not have been expended so wisely, or in such proper and judicious manner, were it not for the supervision, and I will say, the kindly supervision, of the Public Roads Bureau of the Federal Government.

"Because of the plans and standards that the Bureau of Public Roads have (sic) brought to our State, we have handled in our State this one hundred million dollars much more efficiently, and in a much more satisfactory way to our people, than we otherwise could have handled it. I come from a State that is proverbially Democratic, and that believes in "State rights," but the kindly supervision of the Bureau of Public Roads in giving us an incentive to build roads is the kind of supervision that we want the Federal Government to exercise in our State.

"Now, if I can answer any questions, I will be glad to do so."

MR. HUDSPETH (a Congressman from Texas): "Do you find

²⁶ This testimony was given on February 15th, 1926.

the supervision of the Federal Government in this road-building work highly beneficial, or as beneficial as we have found it to be in the State of Texas?"

MR. PAGE: "Exactly so; it has been exceedingly beneficial. All our co-operative relations with the Bureau of Public Roads have been of the most beneficial and cordial nature."

MR. HUDSPETH: "We have been getting better service since we have had the supervision of the Federal bureau, and the assistance of their engineers in providing plans."

MR. PAGE: "Yes, sir. In the expenditure of our money, we have derived a benefit far in excess of the five million dollars that was contributed through the Bureau of Public Roads."

An effort has been made in preceding pages to stress the highly significant fact that the Federal Highways Acts and their administration have given general satisfaction. But if the impression has been given that they have been above criticism, it must speedily be corrected. A number of defects have been discovered during the past nine years. Some have been remedied; others remain. In the Middle and Far West, state highway engineers frequently complain of long delays in securing federal approval of projects. Many of them believe that their district engineers should be given greater authority. The truth of the matter is that their district engineers already possess the requisite authority, but hesitate to use it. Certain federal men refer innumerable minor details to Washington before taking final action; others tell the states to go ahead, and secure formal approval later. If some of the federal engineers of the West were forced to take a greater measure of responsibility for their acts, the work of

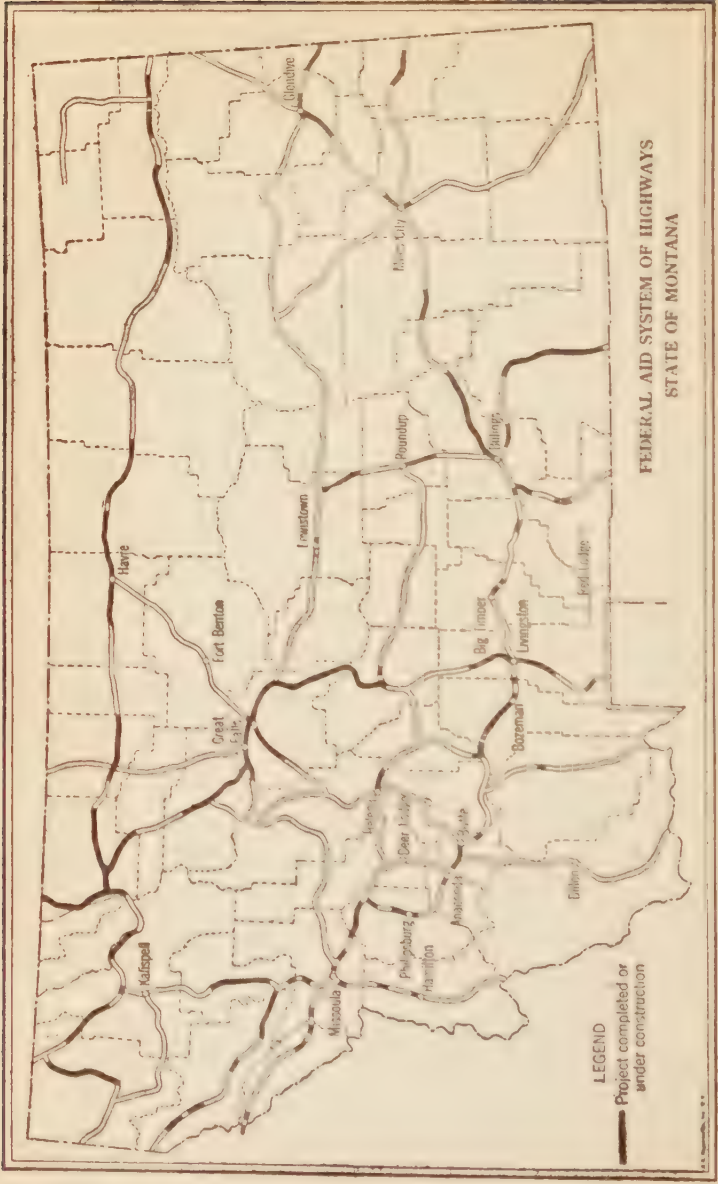
road building in their districts would proceed at a faster pace.

Federal highway engineers are grossly underpaid. Their salaries average at least one thousand dollars below the current market rate for men with the ability and training they should possess. Nearly all the wealthy and progressive states have adopted higher salary scales for their highway departments. In more than one state the chief highway engineer receives a larger compensation than the Chief of the Bureau of Public Roads. Under such circumstances it is difficult to procure good men, and even more difficult to retain them. Yet it is generally agreed that the calibre of the engineers in the federal service is surprisingly high—higher than the rate of remuneration would suggest.

Undoubtedly the greatest weakness of the system of federal aid for highways, however, is the provision of law which permits a state to dissipate its energy and its resources on the construction of innumerable unrelated and unconnected projects, without building a single through highway. No state would be guilty of such folly if its state highway department were authorized to determine which roads should be improved, and when; but in many commonwealths federal aid is matched only in part or not at all from state funds, the burden falling mainly on the counties. Under such circumstances each county is free to determine whether it will ac-

cept federal aid, and whether it will improve the portions of arterial highways lying within its borders. The results of such a system were described by Secretary of Agriculture Jardine in his address before the annual meeting of the American Association of State Highway Officials, in November, 1926. He said in part: "Certainly there has been experience enough to prove that complete connection of main arteries is practically impossible so long as there is dependence on county financing. The reasons are perfectly obvious. All sections of the major State roads in the various counties are not invariably the roads in which county interest is the greatest. By their very nature, the roads of the State and Federal-aid systems are the most heavily travelled highways. In many instances the traffic which demands their improvement is contributed in a smaller degree by counties through which they pass than by other counties or even other States. It is not unnatural that the authorities of such counties should be unwilling, and they often are financially unable, to assume a share in the cost of the improvement." The Secretary might have gone still further. He might have painted a picture of states without a single improved thoroughfare, whose main highways alternate between well-paved surfaces and mud holes. He might have told of mile upon mile of road paved without regard for traffic needs. As an example of the practices regularly fol-

lowed in a number of states, one might well cite the case of Valdosta. Valdosta is a little town in south-east Georgia, almost at the Florida border. The road which runs south from it is clay-gravel, and carries from seven hundred to eight hundred vehicles a day. Running west from the town is a road paved with a high grade of concrete, over which but three hundred vehicles pass each day. Instances of this sort might be multiplied almost without number in those states which resort to county financing. Of thirty-eight projects recently submitted by a Southern state and approved by the Bureau of Public Roads, not more than two or three were connecting. Federal funds and the state or county appropriations which match them must be used on the approved seven per cent system, of course; that is required by law. But in many states the seven per cent system still embraces a large mileage of unimproved roads, and it is possible to dissipate federal aid on an almost unlimited number of unrelated projects without violating any provision of the federal statutes or any ruling of the Bureau of Public Roads. The accompanying map shows the status of the federal aid system of highways in Montana. It speaks for itself. Legislation designed to put an end to the evils of county financing by requiring all states to match federal funds with direct state appropriations has twice been before Congress, and twice has been deferred to give the states more time to correct



their laws. Further delay should not be tolerated.

The Bureau of Public Roads does not require a uniform system of state accounting, but a committee of the American Association of State Highway Officials is now preparing the details of such a system, which in all probability will be generally adopted. A certain amount of uniformity already exists because of the necessity of supplying the federal bureau with a vast amount of detailed information on forms which it prepares and supplies to the states.

Most insatiable, perhaps, of all public demands is the demand for improved highways. Farmers must have roads from the shipping points and agricultural centres to the surrounding producing areas—roads which will enable them to market their crops, particularly their perishable crops, with ease and certainty. Manufacturers and merchants must have highways to facilitate the transportation of raw materials and manufactured commodities. Large numbers of tourists are particularly concerned in the development of a system of smooth, hard-surfaced roads connecting the cities with the points of natural interest.²⁷ The automobile has become the servant of all classes. Within the last decade the motor vehicle registration of the United States has increased more than four-fold. In 1926 it reached the amazing total of twenty-two millions. The impor-

²⁷ Report of the Chief of the Bureau of Public Roads, 1921.

tance of a system of improved highways in time of war has not been overlooked. A few years ago, the Bureau of Public Roads requested the War Department to make a study of the highways of the country for the purpose of selecting those most significant from a military standpoint. It was realized, of course, that the roads required for commercial and national development were nearly identical with those essential for military purposes. The detailed investigations were conducted by the department commanders, whose recommendations were co-ordinated under the direction of the General Staff and furnished to the Bureau of Public Roads as a complete report covering the highways of the United States important from a military standpoint. This report was then taken up in conferences with the state highway departments with a view to expediting the improvement of the highways selected. As General Pershing declared in 1921, speaking before the Senate Committee on Post Offices and Post Roads: "The country road will be of tremendous value in time of war. . . . The roads must be relied upon to obtain the needed food supplies."²⁸

²⁸ Hearings before the Committee on Roads of the House of Representatives, 69th Congress, 1st Session, Feb. 15-20, 1926, p. 4.

CHAPTER VI

THE NATIONAL GUARD

THE first militia law, adopted in 1792, was designed, according to its title, "more efficiently to provide for the national defense, by establishing a uniform militia throughout the United States." It fell far short of its announced purpose, however, for its most significant clause merely provided for the enrollment of every able-bodied male citizen between the ages of eighteen and forty-five, requiring him to furnish a good musket at his own expense. The state forces organized under the provisions of this act were far from uniform. Training and equipment varied greatly from state to state. In some commonwealths there was no militia; in others the militia consisted of a conglomerate mass of tatterdemalions, topheavy with infantry, woefully lacking in artillery and auxiliary troops, commanded by popularly chosen officers whose sole qualification was their ability to make friends.¹

The federal government made no effort to enforce minimum standards. At first it contributed nothing

¹ "The National Guard," address delivered by Maj. Gen. Creed C. Hammond, Chief of the Militia Bureau, before the National Convention, Military Order of the World War, Sept. 25, 1925.

toward the support of the state forces, but in 1808 provision was made for an annual appropriation of two hundred thousand dollars, to be used for the purpose of arming and equipping the militia. The arms and equipment thus obtained were turned over to the states, and utilized under state rules and regulations.² For nearly eighty years no significant change was made in the law. Few crises came to reveal the pitiful weakness of the state forces. The debacle of 1812 failed to impress upon the popular mind the need for an adequately trained body of reserves, and in 1861 the raw, unorganized troops of the North found themselves pitted against equally raw and equally unorganized troops of the South.

It was not until 1886 that Congress made even a feeble gesture in the direction of central supervision of state military activities. In that year the annual appropriation for arming and equipping the militia was increased to four hundred thousand dollars, and the significant proviso was added that "no State shall be entitled to the benefits of the appropriation apportioned to it unless the number of its regularly enlisted, organized and uniformed active militia shall be at least one hundred men for each Senator and Representative to which such State is entitled in the Congress of the United States."³ No administrative machinery was provided for enforcing this

² 2 Stat. L. 40.

³ 24 Stat. L. 401.

requirement, however, and the states were virtually free to obey or disregard it as they saw fit.

In 1903 a proposed measure known as the Dick Bill became law. Though faulty in many respects, it laid the foundation of an efficient system of national supervision over the military establishments of the several states. The organization, armament and discipline of the militia were to be the same as that of the Regular Army, the states being given five years to meet the prescribed standards. Every company, troop and battery of state troops receiving federal aid was required to participate in practice marches or go into camp of instruction at least five consecutive days annually, or to assemble for drill or target practice at least twenty-four times. Provision was made for federal inspection of state units, officers of the Regular Army to be detailed for that purpose. In order to facilitate the work of standardizing the arms and uniforms of the militia, the Secretary of War was authorized to issue standard equipment to the states, receiving the old arms and equipment in their stead. The new equipment was to remain the property of the United States, and for that reason was not to be charged against the annual appropriation for the militia. The states were given permission to purchase from the Army and Navy Departments such supplies as they might need, setting off against their annual allotments the debts thus incurred. Provision was also made for

participation by state units in the encampment, maneuvers and field instruction of the Regular Army, the members of the state militia so participating to receive the same pay, subsistence and transportation as the officers and men in the federal service.⁴

This act marked the beginning of federal supervision of the state military organizations, but its provisions were far from adequate. During the thirteen years that it remained in effect the growth of state troops continued at a snail's pace, and little or nothing was done to transform them into component parts of a unified, well-balanced force. The administration of the law of 1903 was at first carried out through a division of the Adjutant General's office. But successive annual appropriation bills granted federal funds in ever increasing amounts,⁵ and soon all the supply departments, as well as the offices of the Assistant Secretary of War and the Chief of Staff, were involved in the work. This condition of affairs was remedied in 1908 by an executive order creating the Division of Militia Affairs, which was given charge of all matters pertaining to the military establishments of the states. The effect of the organization of this separate division soon manifested itself in prompter action on requisitions for equipment and estimates for funds,

⁴ 32 Stat. L. 775.

⁵ 33 Stat. L. 275; 34 Stat. L. 449, 1174.

and in standardization of the customs of the service.⁶

In 1908 an amendment to the Dick Law marked another step towards the nationalization of the militia. Under its terms the minimum number of men in the various units was to be fixed by the federal government. An attempt was made to insure harmonious relations between the federal government and the states by creating a board of five members, selected from the active officers of the militia by the Secretary of War, to confer with him respecting the condition, status and needs of the state military organizations.⁷

Then in 1916 came the National Defense Act, which provided in sweeping terms for federal supervision—one might almost say control—of the state militia.⁸ Though amended more than twenty times, it has retained much of its original character, and has made possible the creation of a nationally organized body of state troops auxiliary to the Regular Army, and similarly equipped and disciplined. The word "militia" was dropped altogether, the term "National Guard" appearing in its place. The change in phraseology is significant. As finally amended in view of the experiences of the World War, the statute fixed the number of men ultimately to be enlisted at eight hundred for each Senator and

⁶ National Service, November, 1920.

⁷ 35 Stat. L. 399.

⁸ 39 Stat. L. 197.

Representative in Congress, and authorized the President to prescribe the unit or units, as to the branch of service, to be maintained in each state. The qualifications for officers of the National Guard were enumerated in detail. They were to be drawn only from certain specified classes, and were to be examined as to their physical, moral and professional fitness by a board appointed by the Secretary of War. Under the terms of the law each company, troop, battery and detachment in the National Guard was required to assemble for drill and inspection at least forty-eight times annually, and to participate in encampments at least fifteen days, credit being given only for training of a prescribed character and duration participated in by at least a minimum number of officers and men. An oath of allegiance to the United States, as well as to the states, was to be taken. The period of original enlistment, after several changes, was finally fixed at three years. Even the kinds of courts-martial to be used in the National Guard were specified by the National Defense Act, which set forth minutely their jurisdiction and powers.

In order to induce the states to accept this comprehensive supervision of their militia, the federal government offered to assume nearly all the expenses of maintaining the National Guard. The Secretary of War was authorized to issue "such number of United States service arms, with all ac-

cessories, field-artillery material, engineer, coast artillery, signal, and sanitary material, accouterments, field uniforms, clothing, equipage, publications, and military stores of all kinds, including public animals, as are necessary to arm, uniform and equip for field service the National Guard." New equipment was to be furnished as the old became obsolete or unserviceable, and the condemned property returned to the War Department. The states were required only to provide armories and to make adequate arrangements for the protection and care of the property issued to them.

The National Defense Act provided for the payment of officers and enlisted men of the National Guard. Remuneration was to be based on the number of drills attended, but the stipulation was imposed that commissioned officers should be compensated only for periods of instruction attended by at least fifty per cent of the commissioned strength and sixty per cent of the enlisted strength of their respective units. The federal subsidy was to be apportioned on the basis of the number of enlisted men in active service in each state and territory. Funds and property allotted to any state were to be disbursed through an official appointed by the governor. This official was required to give bond to the United States for the faithful performance of his duties, and also to render account of the funds entrusted to his care, receiving pay for his services

from the federal government. An annual examination of his accounts and records by an officer of the Regular Army was provided as an additional safeguard against the misuse of federal allotments.

The units of the National Guard were to be inspected yearly by Regular Army officers, to determine whether they were armed, uniformed, equipped and trained in accordance with federal requirements. The Secretary of War was authorized to detail officers and enlisted men of the Regular Army to duty with the National Guard, permitting them to accept state commissions without prejudice to their federal rank. The National Defense Act strengthened the hand of the federal government by providing that "whenever any State shall, within a limit of time to be fixed by the President, have failed or refused to comply with or enforce any requirement of this Act, or any regulation promulgated thereunder and in aid thereof by the President or the Secretary of War, the National Guard of such State shall be debarred, wholly or in part, as the President may direct, from receiving from the United States any pecuniary or other aid, benefit or privilege authorized or provided by this Act or any other law."⁹ This clause put "teeth" in the act. It gave to the federal government the means of making effective its supervision of state activities. Without the power to withhold allotments, federal inspection

⁹ 39 Stat. L. 197.

could have no meaning; with that power, however rarely it might be used, federal inspection could be a factor of vital significance in the development of the National Guard.

No single board or bureau administers the portion of the National Defense Act relating to the National Guard. Instead, the task of administration is scattered among a number of unrelated and not entirely harmonious agencies—the General Staff of the Regular Army, the corps area commanders of the Regular Army, and the Militia Bureau of the War Department. The General Staff deals with matters of policy, formulating all necessary rules and regulations. Representatives of the National Guard are associated with it for the purpose of giving advice on National Guard matters. The actual work of inspecting state units is done by four hundred and seventy-six commissioned officers and nearly six hundred enlisted men¹⁰ of the Regular Army, who are assigned to duty with the National Guard for the purpose of assisting in the training of its various units. Originally called “inspector-instructors,” these men are now termed merely “instructors,” to minimize state irritation at the thought of too frequent inspections.¹¹ One officer is supposed to be assigned to each National Guard battalion or equivalent unit, but for some time past

¹⁰ As of June 30, 1926.

¹¹ State of New Jersey, Office of the Adjutant General, Bulletin No. 3, 1925.

sufficient instructors have not been assigned to carry out this plan. For purposes of Army organization the War Department has divided the United States into nine corps areas, and it is to the commanders of these corps areas that the National Guard instructors are responsible. Commissioned officers are assigned to National Guard duty by the Secretary of War upon recommendation of the Militia Bureau; enlisted men are assigned by their corps area commanders; but, once assigned, officers and men alike report to the commanders of their respective corps areas. Their connection with the Militia Bureau is only indirect. Each corps area commander has a staff officer whose official title is Officer in Charge of National Guard Affairs, and who directs the routine work of instructing and inspecting the state units.

According to the rulings of the War Department, the Militia Bureau is "that bureau of the War Department which is charged with the administration of approved . . . policies for the National Guard."¹² Actually, however, its work is largely limited to directing in a general way federal inspection and guidance of state forces. It might almost be said satirically that the Militia Bureau has full charge of all matters pertaining to the National Guard except two—the determination of policy, which is nominally the task of the Secretary of War, but is done in large

¹² War Department General Orders, No. 6, issued March 10, 1926.

measure by the General Staff of the Regular Army, and the execution of policy, which is the work of the corps area commanders of the Regular Army. Such a statement would not fairly represent, however, the importance of the Militia Bureau in National Guard affairs. Questions of major importance are referred to it by the corps area commanders for final decision. Reports of instructors are submitted to it, and from these reports the Bureau prepares for each state organization a schedule known as a "Training Directive," indicating the goals to be striven for during the next twelve months. These goals naturally vary from organization to organization and from state to state, since they are intended to correct the faults and strengthen the weak spots reported by the instructors. When a unit is reported as unsatisfactory because of failure to meet the prescribed federal minimum, the Militia Bureau issues a warning to the offending state, but relies in large measure on the corps area commander for information as to whether the warning has been heeded. Officers of the Militia Bureau visit the summer camps in the several states, and in this way secure some direct information as to the effectiveness of National Guard training. The Chief of the Bureau is selected by the President for a four-year period from among active, federally recognized National Guard officers whose names have been submitted by the governors of the several states. He must have

had at least ten years' experience as a commissioned officer of the National Guard prior to his appointment, and have attained at least the grade of major. With him are associated thirty-two officers, three drawn from the National Guard and the remainder from the Regular Army.¹³

The several agencies charged with the various phases of National Guard supervision are largely independent of one another. As a result they frequently fail to co-operate, with disastrous results. The Militia Bureau is most familiar with conditions in the states and with the needs of the National Guard, because its chief is a National Guard officer and his assistants are men who have been associated more or less intimately with the work in the states. But the Militia Bureau has no means of coercing corps area commanders, and no means of compelling the General Staff to look with favor upon its recommendations. In practice, however, such recommendations seldom meet with strong opposition. The besetting sin of the General Staff is procrastination. Urgently needed changes in War Department regulations affecting the National Guard are carefully formulated by the Militia Bureau and sent to the General Staff, only to suffer needless delay before final action is taken.

¹³ "The National Guard," address delivered by Maj. Gen. Creed C. Hammond, Chief of the Militia Bureau, at the Army War College, Washington, D. C., Nov. 5, 1925; "Some Things We Learned About You," Militia Bureau memorandum prepared by Lt. Col. R. M. Cheseldine; Annual Report of the Chief of the Militia Bureau, 1926, pp. 35, 36, 37, 62.

The Militia Bureau has adopted a policy of strict supervision over state activities, but in the execution of that policy it is seriously handicapped. Not only does it have imperfect control over the officers who have been assigned as instructors and who report the condition of state units, but it also has an insufficient number of such officers. Moreover, Congress is reducing annually the already niggardly appropriations available for travelling expenses of instructors, and making it virtually impossible for some to visit each year all the sections within their jurisdiction. In many a state the Regular Army officer on duty with the National Guard is an instructor in name only. He spends but a few days of the year with each section—perhaps omitting some from his list altogether—and in that short space of time he can do little more than inspect equipment and training. Even his inspection is apt to be rather cursory. The number of units rated as unsatisfactory in the course of a year is not large—less than four per cent in 1926; and such units usually raise their standards to meet federal requirements after a warning from the Militia Bureau.¹⁴

Among the regulations which have been issued by the War Department under the terms of the National Defense Act is the provision that no officer can be federally recognized until a certain number of the elements of his command have been duly or-

¹⁴ Annual Report of the Chief of the Militia Bureau, 1926.

ganized, inspected by an Army officer, and formally accepted by the United States. When a new regiment is to be organized in a state, the first step is usually the appointment by the governor of a colonel to take charge of the work, this officer having as yet no federal status. As each company is organized it is inspected. If found to conform to federal requirements, it is given a formal letter of recognition by the Militia Bureau, authorizing the issuing to it of all necessary clothing, equipment and arms, and entitling its members to draw pay for drill and camp service. Before the colonel, lieutenant colonel and regimental staff officers may receive federal recognition, however, they must meet certain requirements as to age and training, and must qualify before a board of officers appointed by the Secretary of War.¹⁵ These precautions should greatly reduce the number of poorly qualified persons selected for political reasons, and should make it impossible for such persons to secure federal recognition. As a matter of fact, they have reduced the number of political appointments. There is no doubt that the calibre of National Guard officers is much higher today than formerly. But politics must still be reckoned with in many commonwealths. More than one federally recognized National Guard officer holds his office by virtue of his ability to control

¹⁵ "The National Guard," Gen. Hammond's address at the Army War College, Oct. 25, 1926; National Service, Oct., 1921.

votes. Federal regulations have not been entirely successful in weeding out incompetents.¹⁶

As previously pointed out,¹⁷ the federal government bears most of the expense of arming and equipping the National Guard. In each state the governor appoints a person who, when federally approved, is known as the United States property and disbursing officer. He is held accountable for all federal property issued to his state. When the commander of any organization of the National Guard needs fresh supplies, he fills out a formal requisition and submits it to his adjutant general, who passes it on to the corps area commander for approval. Requisitions for motor vehicles, animals and certain technical equipment are forwarded to the Militia Bureau for final approval; concerning all other supplies the action of the corps area commander is final. Shipment is usually made to the organization commander initiating the requisition, but the shipping tickets are forwarded to the United States property and disbursing officer, who sends two copies to the organization commander concerned. One copy is signed and returned to the United States property and disbursing officer; the other is retained by the organization commander for his records.¹⁸

¹⁶ Cf. Report of the Chief of the Militia Bureau, 1926, p. 59, comment of the Commander of the Sixth Corps Area.

¹⁷ Cf. *supra*, p. 128.

¹⁸ Maj. Gen. Hammond's Nov., 1925, address on "The National Guard."

The National Defense Act is very explicit as to the accountability of states for property assigned to them. "All military property issued to the National Guard as herein provided shall remain the property of the United States. Whenever any such property issued to the National Guard . . . shall have been lost, damaged, or destroyed, or become unserviceable or unsuitable by use in service or from any other cause, it shall be examined by a disinterested surveying officer of the Regular Army or the National Guard, detailed by the Secretary of War, and the report of such surveying officer shall be forwarded to the Secretary of War . . . ; and if it shall appear to the Secretary of War from the record of survey that the property was lost, damaged, or destroyed through unavoidable causes, he is hereby authorized to relieve the State . . . from further accountability therefor. If it shall appear that the loss, damage, or destruction of property was due to carelessness or neglect, or that its loss, damage, or destruction could have been avoided by the exercise of reasonable care, the money value of such property shall be charged to the accountable State . . . , to be paid from State . . . funds. . . . If any State . . . shall neglect or refuse to pay . . . the money equivalent of any loss, damage, or destruction of property charged against such State . . . , the Secretary of War is hereby authorized to debar such State . . . from further participation in any and

all appropriations for the National Guard until such payment shall have been made.”¹⁹

The law seems to make adequate provision for safeguarding federal property issued to the National Guard, but it has not prevented excessive losses. The methods adopted by a number of states for handling National Guard equipment and supplies are notoriously inefficient. Inadequate storage facilities have in many cases complicated the problem still further. During the fiscal year 1926, according to the Report of the Chief of the Militia Bureau,²⁰ the value of federal property lost or stolen while in the possession of the states was about two hundred and twenty thousand dollars. Among the articles which vanished into thin air were some seven thousand blankets, fourteen thousand shirts, eight thousand pairs of shoes. Several of the corps area commanders complain that equipment and supplies issued to the National Guard receive inadequate care.²¹ It is generally understood that a great deal of property lost, stolen or damaged because of rank carelessness is wiped from the states' accounts by the simple process of listing it under the heading: “Rendered unserviceable by fair wear and tear.” Only about five per cent of the total value of the federal property in state hands made unfit for use during 1926 was charged against the states. There

¹⁹ 39 Stat. L. 197, Sec. 87.

²⁰ Appendices N and O.

²¹ Report of the Chief of the Militia Bureau, 1926, pp. 59-60.

can be little doubt that the figure should have been higher. Even after responsibility has been definitely fixed, moreover, great difficulty is often experienced in collecting from the states the amounts they owe for property lost or damaged through carelessness, and years sometimes pass without a satisfactory accounting. Yet the records show but one instance in which the federal government invoked its authority to cut off further allotments until payment was made. On the contrary, it is persistently rumored that on one occasion a state was relieved of accountability for twenty thousand dollars' worth of lost property because of political pressure brought to bear upon the Secretary of War. Regardless of the accuracy of this story, it is undoubtedly true that the section of the National Defense Act dealing with state accountability for equipment and supplies is interpreted in a spirit which may be termed either liberal or lax—depending on the viewpoint.

The training given the enlisted personnel of the National Guard cannot by any stretch of the imagination be called exhaustive. The National Defense Act prescribes a minimum of forty-eight armory drills of one and one-half hours each, in addition to fifteen days or more of field training annually; and the training actually given conforms to minimum requirements. Limited Congressional appropriations have compelled the Militia Bureau to rule that a greater number of drills will not be paid for from

federal funds. Aside from the summer camps, therefore, the average enlisted man receives only about seventy hours of training a year, or approximately one evening a week. The camps furnish the one opportunity for intensive work. There are ninety-six in the United States, some of which are open for but the fifteen days prescribed, while others are open from the middle of June until the last of September. Most of them are exclusively for the use of the National Guard, but some thirty camps are also used by R. O. T. C. units and by troops of the Regular Army. They may be owned by the federal government or by the states. State camps are provided by the federal government with the essential camp utilities—water, sewer and electric light systems, maintenance and repair of structures, kitchens and kitchen equipment, and the like. Federal camps, of course, are constructed and operated exclusively with federal funds.²²

About eighty-five per cent of the enlisted strength and a still higher percentage of the officers of the National Guard participate in fifteen days of field training each year.²³ These days provide an excellent opportunity to test the results of the year's work and to discover latent weaknesses that must be corrected. At many of the camps an excessive amount of time is devoted to parades and formal

²² "National Guard Training Camps," by Maj. Gen. Hammond, typewritten statement furnished by the Militia Bureau.

²³ Report of the Chief of the Militia Bureau, 1926, p. 22.

reviews. Every visit to camp by some dignitary is the signal for another exhibition. Officers and men are gradually learning, however, that the fifteen days of camp life are something more than a summer's outing, and that more can be accomplished by a fortnight of intensive effort than by eleven months of sporadic training.

Realizing that the members of the National Guard are in large measure raw recruits without any previous military experience, often in their first year, officered for the most part by men whose military knowledge is somewhat limited, the Militia Bureau includes in its training directives only plans for the basic training of the state troops. Beyond this point the men cannot advance. They receive so little instruction in one year that several years are required to ground them thoroughly in the fundamentals of military science. Even the officers seldom advance beyond basic training, but basic training is for them something very different from the instruction given enlisted men. Officers must be taught command and staff duties, and be prepared to solve problems of organization and personnel. These things are the fundamentals of their work. Every year a number of National Guard officers and a smaller number of enlisted men are given special courses of training at various service schools of the Regular Army. These courses range in length from four days to four months, and cover almost the entire range of the

technical problems of war. During the fiscal year 1927 four hundred and twenty members of the National Guard were given such special instruction. The purpose of the War Department is to fit the National Guard to take the field as thoroughly trained, first-line troops within three months after they have entered the federal service.²⁴

On August fifth, 1917, less than a year after the passage of the National Defense Act, the states were left without National Guard organizations by the drafting of all National Guard troops into the Federal service.²⁵ Reorganization immediately after the war proved difficult, owing in part to the antagonism of the labor unions. Hostility was particularly strong in the mining districts of the West, where it was felt that the chief function of the state troops was the suppression of strikes and disorders beyond ordinary police control. On June thirtieth, 1920, there were fourteen states without National Guard units. Antagonism has gradually diminished, however, and at present ²⁶ every state in the Union

²⁴ Notes on National Guard Training, 1924-5; Report of the Chief of the Militia Bureau, 1926, p. 31.

²⁵ There are two methods by which the National Guard may be taken into the service of the federal government. When "called" into national service, the National Guard units retain their separate entity as state troops, headed by state officers, although subject to the orders of the general government. The Attorney General has ruled that they may not constitutionally be used outside the territory of the United States, although the Act of 1903 provided otherwise. When National Guard troops are "drafted" into the service of the federal government, they "stand discharged from the militia," and are "subject to . . . laws and regulations for the government of the Army of the United States." (N. D. A., Sec. 111.)

²⁶ Jan. 1, 1927.

except Nevada is co-operating with the federal government. The American Federation of Labor has put itself on record as favoring the National Guard movement, although National Guard troops are still called into state service more frequently for "the preservation of order," (*i.e.*, to prevent militant demonstrations by strikers, in most cases) than for any other reason.²⁷

During the four-year period ending June thirtieth, 1924, National Guard enrollment increased rapidly. The following table shows the strength of the active federally recognized National Guard since 1919.²⁸

National Guard Strength, 1919-27

Year	Officers	Enlisted Men	Total
1919	1,198	36,012	37,210
1920	2,073	54,017	56,090
1921	5,843	107,797	113,640
1922	8,744	150,914	159,658
1923	9,675	150,923	160,598
1924	10,996	166,432	177,428
1925	11,595	165,930	177,525
1926	11,435	163,534	174,969
1927	12,192	168,950	181,142

This table shows that the strength of the National Guard has remained practically unchanged since 1924. The National Defense Act contemplated eight hundred guardsmen for each member of Congress,

²⁷ Report of the Chief of the Militia Bureau, 1926, Appendix F.

²⁸ Figures supplied by the Militia Bureau.

making a total of four hundred and thirty-five thousand, but this proved too ambitious a program, so in 1923 the maximum strength was fixed at two hundred and fifty thousand. Congressional appropriations have been so small, however, that it has been found impossible to complete even this modified program. During the summer of 1924 the Militia Bureau was obliged to announce that until further notice no new units would be recognized, and more recent appropriations have permitted but little change in this policy. Until more money is forthcoming enlistments must be curtailed, drills must be limited to the minimum prescribed by law, federal recognition of new units must be suspended, and the development of the National Guard seriously handicapped.²⁹

It seems to be the settled policy of Congress to make inadequate appropriations for the National Guard, and for that reason the development of a strong reserve force, supplementary to the National Guard but ready to bear its share of the burden in time of war, is essential. Such a force is contemplated by the National Defense Act, but practically nothing has been done to foster it except to record the names of fifteen hundred officers and some six hundred enlisted men.³⁰ It is generally felt that the

²⁹ "Organization of the National Guard," by Lt. Col. N. J. Wiley, Militia Bureau.

³⁰ "The National Guard," Gen. Hammond's address of Oct. 25, 1926.

National Guard should be further developed before any real attempt is made to build up the Reserve.

One of the most serious problems confronting the National Guard is the large annual turnover, both officers and enlisted men being affected. One-third or more of the enlisted men sever their connection with the National Guard every year, while one-fifth of the officers usually do likewise. The turnover for several recent years is given below:

<i>Year</i>	<i>Officers</i>	<i>Enlisted Men</i>
1923	—	35%
1924	33%	43%
1925	22%	36%
1926	22%	—
1927	14%	40%

The effect of this astonishingly high turnover on National Guard efficiency is so obvious as scarcely to need comment. Officers and men have barely learned the rudiments of military training when their places are taken by raw recruits with whom a fresh start must be made. Officials of the Militia Bureau take comfort in the thought that large numbers of citizens are receiving partial training which may stand them and the nation in good stead in the event of a major emergency; but there is no doubt that the National Guard as at present organized is anemic. It requires frequent transfusions of new blood.³¹

³¹ "The National Guard," Gen. Hammond's address of Oct. 25, 1926.

One cause of dissatisfaction is undoubtedly the nature of—and sometimes the lack of—equipment furnished by the federal government. The practice is regularly followed of issuing used clothing to new recruits. Many of the states complain of inadequate animal and forage allowances. Technical equipment of all kinds can be procured only with the greatest difficulty. The following paragraph from the 1926 annual report of the Chief of the Militia Bureau is illuminating: “The condition of the sixteen observation squadrons and twelve photo sections of the National Guard at the close of the fiscal year 1926 was satisfactory. The training of these units, however, has been impeded by a lack of service equipment both primary and auxiliary. The JN type primary training airplane, a war-stock surplus, has been the standard issue to the National Guard since the organization of the first unit in 1921. This airplane is not suited for the installation of service machine guns, radio, or photographic equipment. All training missions during the armory drill season have therefore been performed with obsolete or obsolescent equipment.”³² More suitable equipment requires more money. The solution of the problem must await the action of Congress.

Federal appropriations for the National Guard are not adequate; of that fact there can be no doubt. Yet they total some thirty million dollars annually,

³² P. 25.

a larger sum than is paid to the states for any other form of federal aid except roads. The growth of the federal subsidy for the National Guard is shown in the table below:³³

Payments to the States for the National Guard

1912	\$ 4,131,190
1913	3,740,713
1914	6,499,952
1915	4,847,744
1916	6,467,522
1917	8,876,195
1918	11,053,562
1919*	3,774,772
1920*	2,943,208
1921	17,691,674
1922	22,373,633
1923	22,357,478
1924	26,591,308
1925	29,754,151
1926	30,179,781
1927	31,363,935

* Reorganization period following the War.

About one-third of the federal subsidy is used to defray the expenses of the fifteen-day camps. Included in this item are the pay, transportation and subsistence of troops, the hire and forage of animals, and numerous miscellaneous items. Another third is required to pay officers and men for their attendance at armory drills throughout the year. The remaining third is used for a number of purposes,

³³ Figures furnished by the Militia Bureau.

such as the sending of National Guard officers to service schools, the transportation of equipment to the states, and the expenses of Regular Army officers on duty with the National Guard.³⁴

Federal expenditures represent about two-thirds of the total cost of maintaining the National Guard. The remaining one-third is borne by the states.³⁵ In this respect the National Guard subsidy is peculiar, for all other recent federal aid statutes require the states to match federal appropriations, and in most cases the federal grant represents but a tithe of what the states themselves are spending for the work. The large federal contribution is justified on the ground of paramount federal interest in the organization and training of first-line troops ready to supplement the Regular Army in time of emergency. It is urged with reason that nearly all the states are maintaining National Guard troops far in excess of their requirements for purposes of preserving order, and that many of the states have accepted units for which they have no conceivable need, but which are essential to the development of a sound, well-balanced reserve army. In this category are anti-aircraft and field artillery units, bridge trains and the like.

In order to determine the attitude of National Guard officials towards the National Defense Act

³⁴ "The National Guard," Gen. Hammond's address of Sept. 25, 1925.

³⁵ *Financial Statistics of States*, 1923.

and its administration a number of questions were put to the adjutants general of thirty-seven states. The first question asked was: "Have federal funds stimulated the growth of the National Guard in your state?" All but five replied in the affirmative. Many expressed the belief that without federal aid their states would have no National Guard units, or at best only a few scattered organizations. The reply of the adjutant general of a Mid-Western state is typical: "Federal aid has made possible the development of the National Guard of this State, both in size and efficiency, to a point unattainable with State funds alone."

Opinion was somewhat more divided on the question: "Has federal supervision in any way affected your state standards?" Twenty-seven adjutants general agreed, however, that their organizations were better trained and more efficient because of contact with representatives of the federal government, while but ten replied that their standards were already so high as to be unaffected by the criticisms of Regular Army officers. Men are seldom prone to give credit where credit is not due, and it may safely be assumed that most National Guard troops are better trained, equipped and disciplined than they would be without federal supervision.

Ten of the state adjutants general felt that the federal government had at times been guilty of attempting unreasonable domination of their plans

and policies. Ten is not a large number. It is only twenty-seven per cent of all the adjutants general whose opinions were obtained. But it is far too large. Among two hundred and twenty-eight state officials administering all other forms of federal aid, only nine could be found who feared federal domination. Evidently something is wrong with the administration of the National Defense Act. The "something" seems to be the General Staff and its attitude towards National Guard affairs. Nearly all the adjutants general who expressed dissatisfaction with the present federal policy took care to emphasize the fact that their quarrel was with the General Staff, and not with the Militia Bureau. Moreover, they are not alone in their aversion to General Staff methods. From numerous sources has come the report that the General Staff is attempting to control details of administration, thereby usurping the prerogatives of the Militia Bureau. The General Staff is composed for the most part of Regular Army officers, many of them unfamiliar with the problems of the National Guard and little interested in its development. Supervision by the General Staff of all the details of federal co-operation with the state forces would be highly unfortunate. It would also be illegal. The National Defense Act specifically stipulates:³⁶ "Members of the General Staff Corps shall be confined strictly to the discharge of duties

³⁶ Sec. 5.

of the general nature of those specified for them . . . , and they shall not be permitted to assume or engage in work of an administrative nature that pertains to established bureaus or offices of the War Department, or that, being assumed or engaged in by members of the General Staff Corps, would involve impairment of the responsibility or initiative of such bureaus or offices, or would cause injurious or unnecessary duplication of or delay in the work thereof."

Such a provision is easy to enact, but extremely difficult to enforce. Differences of opinion are sure to arise as to what constitutes "duties of a general nature." And since such differences of opinion are usually settled in favor of the General Staff, it will doubtless continue to dominate National Guard activities, relegating the Militia Bureau to a subordinate position.

Division of responsibility is nearly always unfortunate. It is particularly unfortunate when most of the authority is vested in a group least informed and therefore least competent to exercise it. The conclusion is inescapable that a certain amount of attempted federal domination of state affairs will continue until the wings of the General Staff are clipped, and the Militia Bureau is given a larger measure of control over National Guard affairs. This might well be done by raising the Chief of the Bureau to the rank of an Assistant Secretary of

War, charged with the administration of War Department policies relating to the National Guard.³⁷

A number of minor weaknesses have manifested themselves since the passage of the National Defense Act. Many have been corrected by supplementary legislation, but a few still remain. In several states the training of National Guard troops has been hampered by a lack of suitable armories. Some units have poor range facilities, while other units adequately provided for in this respect fail to take advantage of the opportunity for target practice. The procedure by which commissions in the Regular Army are obtained for National Guard officers is cumbersome and confusing. But these defects are already known to the Militia Bureau, and in all probability they will not long be permitted to continue.

It has already been suggested that the National Defense Act differs in several respects from the other six major statutes which extend federal aid

³⁷ This chapter was read and criticised by members of the staff of the Militia Bureau, who suggested a number of changes and omissions. These suggestions have not been followed in all instances. Militia Bureau officials urged particularly that critical remarks concerning the work of the General Staff be deleted. In one communication Lt. Col. R. M. Cheseldine of the Militia Bureau wrote: "Since in expressing some of your conclusions you make reference to texts which you have obtained from the Militia Bureau, it might appear that the conclusions expressed were those of the Militia Bureau, and not your own." To prevent the possibility of such a misinterpretation, the author wishes to state specifically that he alone is responsible for all statements of fact and of opinion contained not only in this chapter, but in the entire volume. The Militia Bureau has been most kind in supplying statistical and other data, but has had no part in shaping conclusions.

to the states. In the first place, it does not require the states to match federal funds. There seems to be good reason for this divergence from the usual practice. Second, it fails to vest administrative responsibility in a single head. Apparently there is no reasonable justification of this arrangement. There is still a third way in which the National Defense Act differs from other federal aid statutes. It employs mandatory language throughout, instead of merely stating the conditions attached to the grant of federal funds. "The organization of the National Guard shall be the same as that of the Regular Army." (Sec. 60.) "No State shall maintain troops . . . other than as authorized." (Sec. 61.) "The discipline . . . of the National Guard shall conform to the system which is now or may hereafter be prescribed for the Regular Army." (Sec. 91.) Compare this formidable language with the terminology of the Federal Aid Road Act of 1916: "The Secretary of Agriculture is authorized to co-operate with the States, through their respective State highway departments, in the construction of rural post roads." Yet the authority of Congress is as complete over highways as over the militia of the several states, and no greater powers are conferred by one act than by the other. Both statutes really mean: "The states must do these things if they expect to receive federal funds, and not otherwise." The National Defense Act could have ac-

complished its purpose equally well if it had been phrased in language a little less offensive to local pride. Perhaps it could have accomplished its purpose still more successfully, for the use of mandatory phrases has doubtless encouraged some Regular Army officers in their attempt to control state affairs.

CHAPTER VII

VOCATIONAL EDUCATION

THE first decade of the twentieth century witnessed the awakening of a widespread interest in vocational education. Many persons realized for the first time that our school systems were failing in large measure to meet the needs of the young people of the nation. The large numbers of children who left school at an early age usually did so without opportunity for choice of an occupation or adequate understanding of the need of preparation for it. Those who remained often found that their training was designed to prepare them for admission to higher educational institutions which they had no intention of entering. Manual training high schools, so called, were becoming fairly common; but most of them differed from other high schools only in that they added such courses as woodwork and carpentry to the regular curriculum. The need for courses of training specifically designed to produce skilled workers in the various trades was but dimly recognized.

Those who first stressed the need for vocational education were chiefly interested in industrial train-

ing. They saw that the old apprenticeship system had broken down, and was failing to produce skilled workers. The multiplication of routine functions had robbed the beginner of any guarantee that in serving his apprenticeship he would have opportunity to acquire mastery of his trade. A little later, agriculture and home economics were included in the program. Students of farm methods and farm life pointed out that farming under modern conditions required some familiarity with scientific processes and with at least the fundamentals of business. Experts in home economics subjects stressed the value of home making, calling attention to the fact that few girls received any special training for this important vocation, although most of them eventually made it their life work.

As early as 1910 the American Federation of Labor framed a vocational education bill for the consideration of Congress which resembled in many respects the bill that later became law. This proposed measure provided for the payment of federal funds to the states for the purpose of "encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools," and "preparing teachers for those vocational subjects in State normal schools."¹ Between 1910 and 1914 no fewer than thirteen bills of a similar nature were introduced in either house of Congress, and in the

¹ "Industrial Education," pamphlet of the American Federation of Labor, Washington, D. C., First Ed., 1910, p. 20.

latter year Congress authorized the appointment of a committee to study the whole problem of federal aid for vocational education. This committee, headed by Senator Hoke Smith of Georgia, prepared a bill quite similar in form to the Agricultural Extension Work Act,² making provision for federal subsidies to the states, and containing the usual clauses designed to protect federal funds and to secure at least minimum state standards of performance.

In 1917 this measure, popularly known as the Smith-Hughes Act, became law. It provided for a comprehensive system of vocational training in the common, wage-earning employments. An annual appropriation was made, rising gradually to three million dollars by 1926, to be used in "co-operating with the states in paying the salaries of teachers, supervisors or directors of agricultural subjects." This subsidy was to be distributed in the proportion which the rural population of each state bore to the rural population of all the states, as determined by the last preceding federal census. The minimum allotment to any state was to be five thousand dollars prior to and including 1923; after that it was to be ten thousand.³

A similar appropriation, with a similar minimum, was made for the purpose of co-operating with the

² The Smith-Lever Law. Hoke Smith sponsored this measure in the Senate.

³ 39 Stat. L. 929.

states in paying the salaries of teachers of trade, home economics and industrial subjects," to be apportioned to the states on the basis of their urban population. Still another section appropriated a sum reaching a maximum of a million dollars annually by 1921, "for the purpose of co-operating with the states in preparing teachers, supervisors and directors of agricultural subjects and teachers of trade and industrial and home economics subjects." This money was to be allotted to the states on the basis of total population, the minimum to each state after 1919 being ten thousand dollars.

As in previous subsidy legislation, each state was required to accept the terms of the act through its legislature, or provisionally through its governor, and to appoint its treasurer custodian of federal allotments. There was the usual provision for matching the federal dollar, the state money appropriated for this purpose to be used exclusively for the training and salaries of teachers. Expenditures for buildings, equipment and other requisites were to be made entirely by the states or local communities, the total resources brought under federal supervision thus being far in excess of double the federal subsidy.

Another condition upon which the grant was given was that each state should designate or create a board, consisting of at least three persons, vested with the necessary power for co-operating with the

newly created Federal Board for Vocational Education in the administration of the act. Permission was given to designate the state board of education or any other body having charge of public education or any kind of vocational training within the state.

The Smith-Hughes Act imposed several specific obligations upon the state boards. They were required to prepare in considerable detail plans showing the manner in which they contemplated using the joint federal and state funds, and to submit them to the Federal Board for approval. These proposals were to set forth the kinds of vocational education to be developed, the kinds of schools and equipment to be provided, the courses of study to be offered, the methods of instruction to be adopted, and the qualifications to be required of teachers. Annual reports to the Federal Board were to record accomplishments, and also to show receipts and expenditures of money under the provisions of the act. On the basis of these reports and of its own investigations the Federal Board for Vocational Education was to determine whether the states were meeting their obligations, and to withhold allotments from states in which conditions were found to be unsatisfactory. Each state was given the right to accept the benefits of one or two of the three separate grants made for vocational education by different sections of the statute without accepting them all, its obligations then being limited to those imposed in

connection with the subsidies it received. The minimum allotment for the training of teachers had to be accepted, however, if anything were to be accepted for teachers' salaries.⁴

The Federal Board for Vocational Education, composed of four ex-officio members and three appointive members, holds regular monthly meetings, with numerous special meetings for the consideration of special business. At the regular meetings major matters of policy and administration requiring executive approval are considered. The Board has translated a great deal of the general language of the act into specific requirements covering every phase of vocational education. Take, as an example, supervisors of agriculture. The law provides that "the State board, with the approval of the Federal board, shall establish minimum requirements for . . . experience or contact for . . . supervisors . . . of agricultural subjects."⁵ Standards, therefore, are to be set up in each case by the state itself. But in order to assist the states in formulating satisfactory standards, the Federal Board has made the following "suggestions" concerning the agricultural supervisor:

He should have at least three years of successful experience as a teacher of agricultural subjects in an approved vocational school.

From twelve to fifteen semester hours in approved educational subjects under a qualified teacher trainer, including—

⁴ 39 Stat. L. 929.

⁵ Sec. 12.

a. Supervision and administration of a program of vocational education in agriculture.

b. The making and utilization of occupational and job analysis for training agricultural teachers and organization of content for agricultural courses.

c. Methods of training agricultural teachers.^c

Equally definite requirements are set up by the Federal Board for other phases of vocational education. These requirements are not phrased in mandatory language. On the contrary, a conscious effort is made to avoid a dictatorial attitude. The reason for making such suggestions to the states is given in the following sentence: "In order to secure reasonable efficiency . . . , the Federal Board believes that State boards in setting up minimum qualifications should equal or exceed" these proposed federal "qualifications, which are believed to be desirable minimum requirements." But every state understands that unless it can show good cause why it should not meet the minimum requirements of the Federal Board, it must meet those requirements or forfeit its allotment. The standards proposed by the Federal Board for Vocational Education are enforced almost as consistently as the specific requirements of the Smith-Hughes Act: the only difference is that exceptions are occasionally made to board rulings, while no exceptions can be made to the provisions of the law.

The Smith-Hughes Act has been severely criti-

^c "Policies of the Federal Board for Vocational Education, Approved Dec. 17, 1925," Monograph No. 2, p. 7.

cised because it created a new agency for the administration of new educational activities, instead of vesting the work in the pre-existing Bureau of Education. Indeed, the educational work of the federal government ought not to be divided between two separate and largely unrelated agencies⁷ without good reason. A number of good reasons exist, however, for establishing an independent board to administer the Smith-Hughes Act. Fundamental differences between general education and vocational training suggest that they require essentially different treatment. Different methods must be followed and different objectives set up. The regular professional educators are not equally competent to work in both fields, and there is a real danger that if vocational education were committed to their care it would be treated as merely another phase of the usual educational process, to be judged by the same standards and fitted to the same pattern. Moreover, the creation of a board makes possible the representation of all the economic groups interested in vocational training. "The Federal Board for Vocational Education," according to the provisions of the law, shall consist of certain *ex officio* members and three citizens of the United States, one of whom shall be "a representative of the manufacturing and commercial interests, one a representative of the

⁷ The only direct contact between the two is furnished by the Commissioner of Education, who is *ex officio* a member of the Federal Board for Vocational Education.

agricultural interests, and one a representative of labor." ⁸ This arrangement has worked well in practice, and ought not to be disturbed.⁹

The actual work of administration is in the hands of a salaried director appointed by the Board. Under the director and responsible to him are the chiefs of the four services—Trade and Industrial Education, Agricultural Education, Home Economics Education, and Commercial Education. Recently another executive post has been created—Editor and Educational Consultant. For administrative purposes the country has been divided into four regions, each comprising about twelve states; and to each of these regions is assigned an agent of the Trade and Industrial Education Service and an agent of the Agricultural Education Service. These men inspect the work of the states, and offer suggestions for improving state procedure. The home economics appropriation is limited, and for that reason the Home Economics Education Service is compelled to rely upon two agents to cover all forty-eight states. The sole agent of the Commercial Education Service is a specialist in retail selling to whom no territory has been assigned, since federal aid is not granted to the states for commercial education.¹⁰ A special agent without assigned territory

⁸ Smith-Hughes Act, Sec. 6.

⁹ Prosser and Allen, "Vocational Education in a Democracy," pp. 477-8.

¹⁰ Cf. *infra*, p. 169.

is attached to the Trade and Industrial Education Service. She is in charge of industrial problems connected with girls and women. In addition to its four regional agents the Agricultural Education Service has an agent who devotes his time exclusively to the problems of the colored schools.

Each state has set up a board for vocational education to co-operate with the Federal Board, or has designated an existing board as its co-operating agency. A number of the states have placed the work in the hands of their state boards of education. The first task of a state board is to formulate a plan of vocational education that will meet with federal approval. It is intended that the plan will be designed to meet local conditions and local needs, but it must make provision for a number of essentials, such as adequate training for teachers and adequate equipment; and it must meet the minimum requirements established by the federal act. A state plan is a very comprehensive affair. It may cover one hundred and twenty-five printed pages, or even more. As previously noted, it is required by law to deal with such matters as the training, qualifications and salaries of teachers, supervisors and teacher-trainers; kinds of schools, plant and equipment to be provided, courses of study, methods of instruction, length of courses, entrance and graduation requirements.

Federal funds may be expended only for salaries.

Buildings and equipment must be furnished by the states or by the local communities. The Federal Board has not hesitated, however, to insist upon the inclusion in state plans of suitable provision for buildings and equipment and for their maintenance. It has insisted that these things were as essential as good teachers to proper vocational training.

When the state boards first began to function, many of them were unfamiliar with the technique of vocational education, and the plans they first submitted showed the need of expert guidance. The Federal Board attempted to supply that need through its regional representatives. Group and individual conferences were held with state directors, so that by 1922 procedure had been standardized in large measure. In that year an agreement was made with the states to submit plans for five-year periods, instead of annually, with the understanding that amendments might be offered at any time. This arrangement guarantees a degree of continuity in state work that would be impossible under any one-year plan.¹¹

No attempt is made, of course, to establish uniform standards for all the states. It is literally true that the states formulate their own requirements. They must not fall short of the federal minimum, but they may exceed that minimum as far as they

¹¹ Bulletin No. 1, Federal Board for Vocational Education, Rev. Ed., May, 1922, p. 11.

please. The supervisory work of the Federal Board for Vocational Education consists largely in holding the states to the standards which they themselves have set up. Even within the same state different standards are permitted for white and colored schools, based on the wide variations in social, industrial and economic conditions.¹²

The Smith-Hughes Act as originally framed made no provision for home economics, except for training teachers of home economics subjects. Federal funds for teachers' salaries were to be paid to the states for the salaries of teachers of industrial and agricultural subjects only. Shortly before the bill became law it was amended so as to include home economics, but the appropriation was not correspondingly increased. Instead, the proviso was added "that not more than twenty per centum of the money appropriated under this Act for the payment of salaries of teachers of trade, home economics, and industrial subjects, for any year, shall be expended for the salaries of teachers of home economics subjects."¹³ The states are not required, therefore, to spend any portion of their allotments for home economics, but the maximum of their expenditures of federal funds for home economics purposes is restricted within narrow limits. As a consequence, the home economics portion of the federally aided pro-

¹² Bulletin No. 1. Federal Board for Vocational Education, Rev. Ed., May, 1922, p. 27.

¹³ 39 Stat. L. 929, Sec. 3.

gram of vocational education has been seriously handicapped.

The addition of home economics as a last-minute thought has also resulted in the adoption of standards which are regarded by many state directors as totally unsuited to the needs of home economics students. The law as originally drafted provided that schools or classes giving full-time training in industrial subjects should "require that at least half of the time of such instruction be given to practical work on a useful or productive basis." No such requirement was made, however, concerning agricultural training. There seems to be good reason for such a distinction. It may fairly be assumed that practically all young people studying vocational agriculture have a background of farm life and farm experience; but it may also be assumed with equal fairness that few full-time industrial students begin their vocational training with previous experience in industry. In the agricultural courses, therefore, a greater amount of time may be devote to related subjects and to subjects possessing a purely cultural value. Home economics resembles agriculture rather than industry in that its students usually have a background of previous experience. Most girls have performed some of the ordinary household tasks under the direction of their mothers or older sisters, and for them home management is not entirely a new language. They already know the alpha-

bet. Yet because home economics shares the trade and industry allotment it is obliged under the terms of the Smith-Hughes Act to accept the trade and industrial standards. At least half of the school hours of full-time home economics students must be devoted to "practical work on a useful or productive basis." The Federal Board has lessened the rigor of this requirement by ruling that "practical work on a useful basis" may include not only instruction in subjects commonly recognized as coming within the scope of home economics, but also other "sciences and arts fundamental to home making, . . . such as drawing and design, when applied to clothing and the home, and chemistry, physics, biology, and bacteriology when applied to the household."¹⁴ Even this liberal interpretation has not been sufficient to satisfy the state directors of vocational education, however, and more than half of them complain that they must enforce unsuitable standards or reject their allotments of federal funds for the salaries of teachers of home economics subjects.

As already indicated, the Smith-Hughes Act offers no federal aid to the states for the development of commercial education.¹⁵ The Committee on National Aid to Vocational Education, appointed in 1914, found that at that time there were at least one thou-

¹⁴ "Home Economics Education," Bulletin No. 28, Federal Board for Vocational Education, Rev. Ed., Feb., 1924.

¹⁵ Cf. *supra*, p. 164.

sand business and commercial schools in the United States, and that in addition many high schools were offering commercial courses. It recommended, therefore, that commercial education be omitted from the list of federally aided subjects, and the recommendation was followed in the final draft of the bill.¹⁶ A division of the Federal Board for Vocational Education deals with commercial education, but this division has no supervisory or inspectional duties. It serves instead as a clearing house of information, making studies and investigations in the field of commercial education and giving to the states the benefit of its findings. It co-operates with the states in promoting their commercial education classes and in training teachers of commercial subjects. Since no part of the work is financed with federal funds, no federal standards have been set up.¹⁷ A few commercial courses, however, are given in some part-time schools financed with trade and industrial allotments.

The Federal Board for Vocational Education has adopted all the usual methods of supervising state activities. It examines the annual and special reports of state boards, in addition to the plans submitted to it for approval. The actual work of inspection, however, is done by the agents of the

¹⁶ Report of the Commission on National Aid to Vocational Education, 1914, v. 1, p. 40.

¹⁷ Bulletin No. 1, Federal Board for Vocational Education, Rev. Ed., May, 1922, p. 48 *et seq.*

Board, who regularly visit all the states and observe the manner in which state plans are being carried out. The agricultural and industrial agents visit each state about twice a year. Each home economics agent has a greater number of states to visit, and therefore makes the rounds less frequently. Visits vary in length from three or four days to two or three weeks. A state whose standards of performance are consistently high may see the federal agents but once each year, and then for less than a week. Unless at the request of the state director or supervisor, the federal agents do not ordinarily even visit the schools receiving federal funds. On the other hand, a state which has consistently demonstrated its inability or unwillingness to carry out its plan may expect more frequent and longer visits from representatives of the federal government. It would be impossible for the federal inspectors to visit all the vocational schools of the states within their jurisdiction, and so they are obliged to resort to the "sampling" method, visiting various "typical" schools selected by the state directors. To what extent a "typical" school thus selected represents the schools of the state is problematic. In many cases the information thus gained is of little value. The federal agents have other methods of familiarizing themselves with the work of the states, however. One method is to visit the teachers' conferences. At these conferences they often make formal addresses,

but they also talk with the teachers about their problems, singly or in little groups. Because of long experience, they need only a little time to gauge with surprising accuracy the calibre of the teachers, and to learn from them the weak spots of state administration. It is generally agreed that the inspectional work of the Federal Board for Vocational Education is reasonably thorough. It cannot be compared, however, with the detailed inspectional system of the Bureau of Public Roads, or even the work of the Forest Service.

Every federal bureau administering a subsidy law is anxious to retain the good will of the states. Without that good will there can be no harmonious relations, and satisfactory results cannot be obtained. On the other hand, federal requirements must be enforced, even if the hostility of state officials is thus aroused. What all the bureaus are seeking is a means of maintaining minimum standards and stimulating backward states without giving the appearance of domination. The Federal Board for Vocational Education has been remarkably successful in accomplishing this result. Its policy has been to rely chiefly on suggestion, rather than compulsion. It has permitted the states to work out their own problems in their own way, unless state officials have requested the assistance of federal agents; and it has insisted upon nothing more than compliance with the requirements of the law. Progress has

therefore been slow. In many an instance it has taken four or five years to raise state standards to the point where they could be regarded as satisfactory; but during those years the good will of the states has been retained. During the summer of 1926 the directors of vocational education of thirty-five states were asked whether the Federal Board ever attempted to interfere unreasonably with their plans and policies. From every state director came an emphatic denial of federal domination. "Considerate," "reasonable," "kindly," were some of the adjectives applied to federal supervision. "Our relationship has been and is most cordial and friendly," declared one state official, and his words reflect the general opinion.

Much of the time of the Federal Board is spent in making studies of special problems and in working out a satisfactory technique of vocational training. Vocational education is a new movement in this country. Complete programs, operated under public control, have been in existence but a few years, and many important problems are still unsolved. The Federal Board is best equipped to carry on the needed research, and is in a position to give to the states the benefit of its investigations. It maintains no separate investigational staff. Instead, each agent is a specialist in some line of research, and this is also true of the chiefs of service and of the director. It is the policy of the Board that at

all times each service shall carry on a certain amount of research and service work, and that at least one-third of each agent's time shall be spent upon some special form of investigation and service in the field in which he is specially qualified and with which he is especially familiar.¹⁸

The Federal Board for Vocational Education, like the other bureaus administering subsidy laws, is free from politics. All the members of its staff, including the director, have been chosen under civil service regulations. Even the state employees, from teachers to directors of vocational education, are little influenced by political manipulations. State forestry departments, highway departments, extension services are burdened with the deadwood of partisan appointees in many of the states; but only a very few commonwealths permit politics to interfere seriously with the work of vocational education. This is probably due in part to the generally accepted tradition that education is not legitimate prey for the spoilsman; but there can be little doubt that it is also due to the standards set up by the Smith-Hughes Act and by the Federal Board. The Forest Service makes no attempt to define minimum qualifications for employees of state forestry departments; the Bureau of Public Roads does not prescribe the training to be required of state highway

¹⁸ Ninth Annual Report of the Federal Board for Vocational Education, 1925, p. 14.

engineers; but the Federal Board for Vocational Education "suggests" minimum qualifications of training and experience for all vocational teachers and supervisors receiving federal funds. It is interesting to note that under the terms of the law no such standards may be prescribed for state directors of vocational education, and that the state directors are the men most commonly chosen because of partisan considerations. Politics scarcely ever reaches down and touches the rank and file of vocational teachers. They are well protected by federal requirements. The Smith-Hughes Act should be so amended as to permit state directors of vocational education to be paid in part from federal funds, so that a minimum requirement of training and experience might be established for them.

Federal aid has served as a powerful stimulus to the development of state programs of vocational education. Within a period of ten months after the organization of the Federal Board every state had accepted the provisions of the Smith-Hughes Act, and many of them had formulated tentative plans. The number of federally aided schools has increased virtually fivefold in a period of nine years, and the number of teachers and enrolled pupils has mounted almost as rapidly. The following table will serve as an index of state activity under the stimulus of federal funds:

Growth of Federally Aided Vocational Education ¹⁹

Year	Number of Schools ²⁰	Number of Pupils	Number of Teachers
1918	1,741	164,186	5,275
1919	2,039	194,895	6,252
1920	3,150	265,058	7,669
1921	3,877	324,247	10,066
1922	4,964	475,828	12,343
1923	5,700	536,528	14,458
1924	6,817	652,594	16,192
1925	7,430	659,370	17,524
1926	8,051	753,418	18,717
1927	8,696	784,986	18,900

Most significant of all, though its especial importance is not indicated by the figures, is the increase in the number of teachers. A few years ago the problem of securing trained instructors in vocational subjects was acute. Few of the states were adequately supplied. The framers of the Smith-Hughes Act attempted to remedy this condition of affairs by providing that a state accepting any portion of its allotment must make adequate provision for the training of teachers. They were eminently successful. This clause has been largely responsible for the marked increase in the number of qualified instructors. In some states the demand still exceeds the supply, but in others so many teachers are being turned out by the teacher-training institutions that

¹⁹ Eleventh Annual Report of the Federal Board for Vocational Education, 1927.

²⁰ In the reports of the Federal Board for Vocational Education the term "reimbursement units" is used instead of "schools," because of the difficulty of framing an accurate and unvarying definition of "school."

new graduates can be offered nothing better than places on the waiting list.

There is no better way of illustrating the influence of federal aid than by comparing the development of publicly controlled commercial education with the growth of other forms of vocational training. Since no direct federal financial assistance for the promotion of commercial education is provided by the terms of the Smith-Hughes Act, the states are free to stress or ignore this form of training as they see fit. They have seen fit to ignore it. No state boards for vocational or general education have developed plans for commercial education comparable to the programs they have developed in the other fields of vocational training, and only one commonwealth has a state supervisor to direct and promote commercial education.²¹ Yet the Federal Board has a division devoted to commercial education and its needs, ready to help the states solve their problems. Apparently the offer of federal funds is sufficient to arouse state interest, but the offer of federal advice is not.

If any evidence other than the statistics of growth is needed to show that federal aid has encouraged the development of vocational education, it is found in the replies of thirty-five state directors to the question: "Have federal funds stimulated vocational education in your state?" Three state direct-

²¹ Ninth Annual Report of the Federal Board for Vocational Education, 1925, p. 99.

ors replied in the negative; the other thirty-two answered affirmatively, and, in most cases, emphatically. "Federal funds are almost entirely responsible for the strong program now under way," declared one. Another went so far as to say: "Without the stimulus of federal aid no program of vocational education would have been established in our state."

The total amount paid annually to the states under the terms of the Smith-Hughes Act has increased each year, rising from eight hundred thousand dollars in 1918 to more than seven millions by 1927. The following table indicates the growth of federal aid to the states for vocational education:

Federal Payments to the States for Vocational Education ²²

Year	Amount
1918	\$ 823,386.29
1919	1,560,008.61
1920	2,476,502.83
1921	3,357,494.23
1922	3,850,118.79
1923	4,308,885.68
1924	4,832,920.16
1925	5,614,550.14
1926	6,548,567.92
1927	7,184,901.51

Rapid as has been the growth of federal aid, state expenditures for vocational education have kept pace. In every year since the inauguration of the federal program the states have spent from two to

²² Figures supplied by the Federal Board for Vocational Education.

three dollars of their own money for every dollar they received from the federal treasury, the average being about two dollars and a half.

Not only have state programs been expanded, but state standards have been raised as a direct result of state contact with the Federal Board for Vocational Education. The specific requirements of the law and the more flexible rulings of the Federal Board have resulted in better teachers, better equipment, and better schools. The teacher of vocational agriculture, paid in part with federal money and subject to federal requirements, is almost invariably a college-trained man, while in many a rural high school the principal under whom he serves has never entered the doors of a college. Under such circumstances the agricultural teacher's annual salary is apt to be several hundred dollars more than that of the principal. Such an arrangement is subversive of discipline, but the teacher is made to understand that the principal, however inferior his training, is the administrative head of the school. Since the agricultural teacher's salary is usually paid in twelve installments and the principal's in ten, the principal possesses such dignity as may come with a slightly larger monthly pay check.

The state directors of vocational education agree that federal supervision has resulted in better planning and execution of state programs. Twenty-six of the thirty-five directors whose opinions were

asked declared that their state standards had been raised by contact with the Federal Board. "Federal supervision has been wholesome, uplifting and encouraging," commented one. Several expressed the belief that federal requirements for vocational education had brought about a clearer understanding of educational needs in their states, and had tended to raise the standards of general education. As one state director put it: "The people of our rural sections are beginning to wonder whether it isn't just as essential that the high school teacher of mathematics have a college education as that the high school teacher of agriculture be college trained."

The agricultural funds under the Smith-Hughes Act are allotted to the states on the basis of their rural population, but there is no requirement that this money must be spent in rural districts. Since every community of more than twenty-five hundred people is "urban" under the definition of the Census Bureau, there are many so-called "urban" districts predominantly rural in everything but name, whose need is for vocational training in agriculture. The Federal Board for Vocational Education believes that the agricultural allotment should be spent in those sections of a state where it will do the most good, regardless of technical distinctions.²³

²³ Bulletin No. 1, Federal Board for Vocational Education, Rev. Ed., May, 1922, p. 38.

The Smith-Hughes Act stipulates that all vocational work in agriculture financed in part from federal funds "shall provide for directed or supervised practice in agriculture, either on a farm provided by the school or other farm, for at least six months per year."²⁴ The need for such a requirement is made clear by the Federal Board in the following words: "In planning any course in vocational agriculture it must be kept clearly in mind that the aim of the course is to make the instruction function on the farm. The most satisfactory practical work is that which is done on the home farm. This practical work should offer experience in the occupation under the conditions of the occupation." The farm boy "needs an opportunity to practice at home the things which he sees demonstrated at school or on nearby farms under the direction and supervision of the teacher." All teachers of vocational agriculture are required, therefore, to assign home projects to their pupils, and to supervise the execution of each enterprise. According to the statement of the Federal Board, "the home project is an enterprise undertaken by the boy with full responsibility on his part for both the financing of the project and the doing of the work, although he may not necessarily do all the work himself."²⁵ Adults enrolled in evening

²⁴ "Agricultural Education," Bulletin No. 13, Federal Board for Vocational Education, Rev. Ed., Feb., 1925, p. 8.

²⁵ "Agricultural Education," Bulletin No. 13, Federal Board for Vocational Education, Rev. Ed., Feb., 1925, p. 9.

classes are also required to undertake special projects, though supervision by the teacher is necessarily on a different basis.

It will be remembered that the county agents functioning under the provisions of the Smith-Lever Act are daily engaged in the task of encouraging the farmers of their communities to experiment with improved agricultural practices, and that they organize the young people into clubs for the purpose of carrying out specific projects.²⁶ It frequently happens, therefore, that the county agents and the vocational teachers of agriculture find themselves engaged in the same work with the same people. They are both teachers of agriculture, directing the farm life of their communities; and they do not always teach the same thing. Many times they have the same pupils—farmers who talk with the county agent during the day and attend the high school teacher's class at night; boys attending high school who are enrolled in cotton, pig or corn clubs. It is not surprising, therefore, that disputes between Smith-Lever agents and Smith-Hughes teachers occur, and that ill feeling has developed. One high school teacher of vocational agriculture encouraged his pupils to carry on a pig raising project, in an effort to teach them the value of proper breeding. The enterprise had scarcely gotten under way when the county agent appeared on the scene, organized the

²⁶ Cf. *supra*, ch. IV.

boys into a pig club, and exhibited the pigs as a club project. The teacher was incensed, and expressed himself in no uncertain terms. As a result, all possibility of co-operation between teacher and agent disappeared. Hundreds of similar instances might be cited.

There is scarcely a state that has not experienced some instances of disagreement between teachers and agents, and in two or three states the situation is so serious that it makes impossible cordial relations between the two services. Numerous efforts have been made to formulate a satisfactory working agreement. As early as February, 1918, only one year after the passage of the Smith-Hughes Act, a joint committee representing the Department of Agriculture and the Federal Board for Vocational Education formally approved a memorandum designed to make clear the duties of extension workers and of vocational teachers of agriculture, and to encourage co-operation between the two services. Other memorandums, understandings and agreements have been framed from time to time by interested groups. One dated 1921 bears the signatures of representatives of the National Society for Vocational Education, the American Association for the Advancement of Agricultural Teaching, the Association of Land-Grant Colleges, and the Department of Rural Education of the National Education Association. In a number of states the directors of exten-

sion work and vocational education have signed agreements delineating the work of their subordinates. If the letter and spirit of these memorandums were everywhere scrupulously observed, disputes and ill feeling between members of the two services would be practically unknown. Unfortunately, some teachers and some county agents refuse to co-operate, and in two or three states they are encouraged in this attitude by the state directors. The solution of the problem lies in teaching people how to work together rather than in changing the formal provisions of the law.

During the ten years that the Smith-Hughes Act has been in force, a number of weaknesses have manifested themselves in the carrying out of state programs. There is a tendency in some states to make vocational schools and classes solely a place of shelter for defectives and delinquents. In other states, vocational training is treated as a minor phase of the general educational program. Those in charge of the work seem unable to realize that vocational training is not intended to fit the student for admission to institutions of advanced learning, but is designed solely to make him a wage earner. All too frequently the traditional organization and procedure of academic education are used, with little or no reference to their appropriateness.

In many of the states a large percentage of the

teachers are without the necessary qualifications—adequate trade experience, technical knowledge, and teaching ability. This state of affairs is due in large measure to the inefficiency of teacher-training institutions. Even the teacher-trainers are frequently without the necessary background of training and experience, and cannot be expected to give to their students the knowledge they themselves do not possess.²⁷ The Federal Board has not been ignorant of these conditions, but until recently it has brought no pressure to bear upon the backward states. It realizes that the problem of finding properly qualified teacher-trainers is not easy of solution. In December, 1925, however, it adopted a ruling which set forth the proper qualifications in considerable detail, and provided that teacher-trainers appointed after June thirtieth, 1926, must satisfy these minimum requirements in order to be eligible to receive federal funds.²⁸ The new standards have occasioned considerable dissatisfaction in a number of the backward states. One director of vocational education declared: "I don't know where we shall look for our future teacher-trainers. To the best of my knowledge there are at present only three persons in the state able to meet the new requirements of the Federal Board." Even though the Board's ruling occasions some inconvenience, however, it should tend to

²⁷ Prosser & Allen, *op. cit.*, pp. 453-6.

²⁸ Monograph No. 2, Federal Board for Vocational Education, Feb., 1926.

correct a serious weakness of state programs of vocational education.

One reason for the large number of poorly qualified teachers is that until recently virtually all the states have stressed the need for training teachers to enter the state service without due regard for raising the standards of teachers already employed. But during the last two or three years the emphasis has shifted, and a number of states are now assuming direct responsibility for improving the professional qualifications of instructors in vocational subjects. To aid in this work, the Federal Board has issued a ruling permitting the states to use fifteen per cent of their teacher-training funds for qualifying local supervisors to assume the task of improving the teachers in service.

A number of the requirements of the Smith-Hughes Act, while they have been of some value in insuring balanced programs of state activity, are unnecessarily rigid and arbitrary. The law stipulates, for example, that at least twenty per cent of the teacher-training funds must be spent on the training of teachers of trade and industrial subjects (Sec. 12); that part-time schools must provide for at least one hundred and forty-four hours of class-room instruction per year (Sec. 11). Clauses such as these make no allowance for varying local conditions. Why should rural South Dakota devote twenty per cent of its teacher-training funds to the

preparation of teachers of industry? As a matter of fact it has not always done so, and has therefore been obliged to forfeit a portion of its allotment. General rules are necessary, but equally necessary are exceptions, so that broad rules may be fitted to local conditions or unusual circumstances. The Smith-Hughes Act might well be amended by inserting after a number of its specific requirements the words: "with such exceptions as may be approved by the Federal Board for Vocational Education."

The essential features of the federal law and its administration can be summed up in a few short sentences. The act contains the provisions common to all recent subsidy legislation, but goes into great detail concerning state standards and state methods of performance. Its requirements are more rigid than those of any other federal aid statute, with the possible exception of the National Defense Act. Added to the specific provisions of the law are the unusually detailed administrative regulations of the Federal Board. Federal supervision of state activities is reasonably thorough, and has aroused practically no resentment. The Federal Board for Vocational Education devotes a great deal of its time to special studies and investigations.

CHAPTER VIII

VOCATIONAL REHABILITATION

MODERN industry is often described as a great giant patiently and tirelessly serving mankind, but thought is seldom given to the price we pay in life and limb for the giant's services. Every year the number of workers disabled in the normal course of industry exceeds the total number of American soldiers and sailors incapacitated during the entire course of the World War. Day and night the fearful toll is taken, and every accident spells stark tragedy. Blindness or the loss of an arm or leg means far more than immediate suffering and later inconvenience; for most persons it means the destruction of earning power. Thousands of skilled and semi-skilled workmen, injured so severely that they can no longer pursue their trades, find themselves cut off in their prime. Dazed and helpless, they sink gradually to the level of the tin-cup mendicant. They have no alternative.

In recent years numerous attempts have been made to solve the problem of the disabled worker. Workmen's compensation laws have been placed upon the statute books of many states. Philan-

thropic agencies have done their share. But they have only scratched the surface. No solution can be adequate which relies wholly or in large part upon the payment of money as a compensation for loss of earning power. Such payments are always inadequate, and at best they but serve to postpone the time when the disabled person and his family must become objects of charity.

Yet it seldom happens that the victim of an industrial accident is totally disabled. His injury may be sufficient to prevent return to his former employment; but that is no indication of his inability to engage in any productive activity. It is said that a colored woman who had been knocked down by a careless motorist was helped to her feet by an aspiring attorney. "Come with me, madam," said he. "You can get damages for this."

"Good Lawd, boss," exclaimed the woman, "Ah don't need no more damages. What Ah needs is repairs."

So it is with most injured workers. Their pressing need is for repairs—for a restoration of their earning power. Many large industrial concerns have recognized this fact, and have tried to find light work for their injured employees. The new jobs, however, have almost invariably been of distinctly lower grade than the old, with correspondingly reduced wages. The railroad conductor who lost his leg has become a crossing tender; the skilled me-

chanic has become an elevator operator or a time-keeper; the skilled but disabled miner has become a checker. Until recently little thought has been devoted to giving these men a new skill, and making their new jobs as good as their old.¹

The first public recognition of the importance of re-training injured workers was probably given by Minnesota, whose Department of Labor and Industries in 1917 launched a study to determine what became of the workers suffering permanent partial disability in compensation cases. Before the study was completed, however, Massachusetts in the spring of 1918 enacted a law directing its Accident Board to supervise the training and placement of persons incapacitated by industrial accident. Other states followed Massachusetts' example, making more or less adequate provision for the vocational rehabilitation of injured workers. An impetus was given to the movement by the work of the federal government with disabled war veterans. Prior to the passage of the federal civilian rehabilitation law, twelve states had made some provision for training or placement, or both, of incapacitated persons. The Minnesota law of 1919 marked an advance over the Massachusetts statute, since it was made applicable to "persons disabled in industry or otherwise." There are large numbers of physically handicapped persons whose disabilities have no connection with

¹ Ninth Annual Report of the Federal Board for Vocational Education, 1925, p. 42.

industrial accidents. Some have met with accidents of other kinds, some are suffering from the ravages of disease, some are congenitally handicapped. It is equally important that these men and women be made self-supporting.²

Numerous estimates have been made of the number of physically handicapped persons in need of vocational training, and a few intensive surveys have been made of small groups. In Cleveland a house to house canvass of one hundred and fifty thousand families disclosed more than four thousand physically handicapped persons, only twenty per cent of whom were so badly incapacitated as to be incapable of self-support.³ It is probably safe to say that in the United States each year eighty-four thousand persons are vocationally disabled who cannot afford to pay for rehabilitation, but who could probably be made independent wage earners.⁴

In the spring of 1920 Congress made provision for an annual subsidy of one million dollars to the states "for the promotion of vocational rehabilitation of persons disabled in industry or otherwise, and their return to civil employment."⁵ The federal grant was to be apportioned on the basis of population, with a minimum of five thousand dollars to any state.

² Sullivan, O. M., & Snortum, K. O., "Disabled Persons, Their Education and Rehabilitation," p. 18.

³ "The Rehabilitation of the Handicapped," from "Wisconsin's Educational Horizon," vol. 3, no. 4, Jan., 1921, published by the State Board of Education.

⁴ Sullivan & Snortum, *op. cit.*, p. 33.

⁵ 41 Stat. L. 735.

As usual, the states were required to accept the provisions of the law and to match federal funds. The administration of the act was vested in the Federal Board for Vocational Education, and each state was directed to designate as its co-operating agency the vocational education board already created under the terms of the Smith-Hughes Law. State plans were to be submitted annually to the Federal Board for approval.

The Fess-Kenyon Act, as the statute was popularly known, defined "disabled person" broadly as "any person who, by reason of a physical defect or infirmity, whether congenital or acquired by accident, injury, or disease, is, or may be expected to be, totally or partially incapacitated for remunerative occupation." Federal and matched funds were to be used chiefly, of course, to pay for suitable courses of training, whether given at home by private tutors or in educational institutions or industrial establishments. The Federal Board ruled, however, that they might also be devoted to the purchase of necessary supplies and equipment for trainees, and that they might be used for medical examinations and prosthetic appliances under certain conditions. Salaries and travelling expenses of state administrative officials and employees were also listed as legitimate expenses. States were not to be reimbursed for outlays made for mere physical restoration or for the maintenance of disabled per-

sons during their courses of training, since these could not properly be considered vocational rehabilitation.⁶

A separate division of the Federal Board for Vocational Education has been set up to deal with the problem of vocational rehabilitation. For the purpose of administering the Fess-Kenyon Act the country has been divided into five districts, each district embracing from eight to twelve states. In addition to the Chief of the Division there are five federal agents, with headquarters at Washington, who carry on the work of federal supervision, each being responsible for the maintenance of federal standards in one district. These agents—four men and one woman—spend about seventy per cent of their time in the field. Each is a specialist in some phase of rehabilitation, and is prepared to give specialized advice to any state, regardless of its section of the country. The one woman agent, for example, is responsible for federal supervision in eight states of the Middle West. Since she has made a special study of problems connected with women in industry, she is expected to aid any state needing expert advice concerning its disabled women workers. The organization of the Civilian Rehabilitation Division is, therefore, partly regional and partly functional.⁷

⁶ "Handbook of Information for State Officials Co-operating in the Administration of the Vocational Rehabilitation Act," Bulletin No. 77, F. B. for V. E., Sept., 1922, pp. 3-11.

⁷ Ninth Annual Report of the Federal Board for Vocational Education, 1925.

Many of the state co-operating agencies are organized on a territorial basis, each member of the staff being assigned to a district and working exclusively in that district. Sometimes there are district offices, and the administration is so decentralized that even the records are kept in separate branch offices. The territorial form of organization is used chiefly by those states which have large populations or great distances, or both. In Pennsylvania is found a hybrid system. The work is handled through district offices, but duplicate records of all cases are kept in the central office. Some states make use of the functional plan, each member of the staff specializing in some phase of the work and each taking the entire state as his territory.⁸

One of the most difficult tasks connected with rehabilitation is the finding of persons to rehabilitate. Thousands of cases doubtless occur every year which never come to the attention of the state authorities. Every state board has its own methods of securing the names of disabled persons in need of special training, though some plans have been almost universally adopted. The state industrial commission or other agency administering the workmen's compensation law is required to co-operate under the terms of the Fess-Kenyon Act. Less frequently other state departments forward the names of dis-

⁸ Sullivan & Snortum, *op. cit.*, p. 170.

abled persons coming to their notice. Civic and business clubs, welfare societies and labor organizations are often asked to aid. In many states pamphlets describing the work of the rehabilitation service are prepared and distributed. Posters are displayed in public places. Personal letters are sometimes sent to physicians and members of the clergy. Considerable publicity has been obtained in a number of states by the preparation for the newspapers of "heart interest" stories, describing actual cases. The papers are usually glad to co-operate. Many incapacitated persons are found through the public health clinics. A few states subscribe to a special news service. Virginia and Alabama have used motion picture films to advantage in arousing public interest, and in Alabama the enumerators of the school census have been directed to report all cases coming to their attention. Unfortunately, the average state makes use of but a few of these devices, and its work is therefore handicapped at the very beginning.⁹ The suggestion has been made that in every state physicians, surgeons and hospitals should be required by law to report to the rehabilitation board within a specified number of days all accidents coming to their attention.¹⁰ Such a law would greatly facilitate the work of rehabilitation.

⁹ Proceedings of the National Conference on Vocational Rehabilitation of the Disabled Civilian, 1925, Bulletin No. 104 of the Federal Board for Vocational Education, pp. 23-5.

¹⁰ "The Rehabilitation of the Handicapped," from "Wisconsin's Educational Horizon," vol. 3, no. 4, Jan., 1927, p. 16.

Other means would have to be found, of course, for discovering congenital cases.

After the name of a prospect has been received, the first task of the state is to make a preliminary investigation, including a personal interview. If the incapacitated person proves to be ineligible, either because he cannot meet state age or residence requirements or because of limited mentality or the nature of his disability, the case is dropped. If, however, he is eligible for the service and seems susceptible of training, the state agent must then determine the job best suited to his needs. It often happens that a period of surgical treatment, followed by convalescence and mental adjustment, must precede any vocational training; but federal funds may not be used for surgical treatment or other work directed only toward physical restoration. Case procedure is being standardized in large measure; but every case will always be an individual problem, requiring individual treatment. The fact that one legless man succeeds at shoemaking is not a necessary indication that all persons who have lost their legs should be transformed into shoemakers. This statement is so obvious as to need no discussion, yet in a number of the states there is a tendency to have one job or one small group of jobs for each kind of disability. Many blind men are taught piano tuning who have no musical ability and not the slightest aptitude for the work. Incidental

factors may be of primary importance in determining the proper vocation, and they should be carefully considered. Mental attitude, for example, is a significant factor. So is previous education. Economic pressure and domestic responsibilities frequently prevent the development of ambitious training programs. One state, in fact, found that only ten per cent of its cases were in a position to receive extended training.¹¹ Training facilities and available employment opportunities must be taken into account. Nor can the preference of the disabled person be ignored. He is much more apt to succeed if taught a trade in which he is interested.

Occasionally the problem resolves itself into a mere matter of placement. The injured worker may be physically able and qualified by training to engage at once in some form of remunerative employment. More often, however, a period of training is necessary. It is sometimes possible to arrange for rehabilitation within the establishment where the injury occurred. If such a plan is followed the rehabilitation service must exercise careful supervision to make certain that the worker is given training and not charity. Usually other methods of providing training are found more satisfactory. Correspondence and evening school courses are suitable

¹¹ Riddle, S. S., "Rehabilitating the Worker When Accident Prevention Fails," *Annals of the American Academy of Political and Social Science*, Jan. 1926.

for many persons, while in some instances tutorial instruction is necessary. Disabled persons are sometimes placed in educational institutions where they will be given specific vocational training suited to their needs.

A most serious problem facing the injured worker is, in many cases, how to keep body and soul together during the period of rehabilitation. Federal funds and the state funds which match them may not be used for maintenance during training, but nine or ten states have made small additional appropriations for this purpose. The maintenance allowance to an injured worker is never large; in Montana, for example, it is thirty dollars a month for a single man and forty dollars for one who is married, extending over a period not to exceed eight months. Maintenance expenditures place only a very light burden on the public treasury. In Pennsylvania they amount to but three per cent of the total state outlay for rehabilitation work. Yet in many instances they represent the difference between success and failure for a rehabilitation program. Many incapacitated persons are without funds, and unable to earn any money until training has been completed. Some means must be found of caring for them during the training period. State directors who have no public funds for the purpose are obliged to turn to private charitable and civic organizations—with the result that the success of a

state activity is made to depend in large measure upon the liberality of private citizens.¹² The federal government should require every state co-operating under the Fess-Kenyon Act to appropriate a small amount for the maintenance during training of indigent persons.

Artificial appliances are frequently necessary to complete rehabilitation. The federal law, however, makes no reference to prosthetic devices, and the general policy of the Federal Board has been to disapprove the expenditure of federal and matched funds for mere physical restoration, on the ground that the Fess-Kenyon Act provides for vocational and not physical rehabilitation. But with regard to artificial members an exception has been made to the Board's general policy. Under a ruling made in 1922, "expenditures from Federal or matched funds for prosthetic appliances are considered legitimate when they are essential to the vocational rehabilitation of the individual. It should be noted, however, that the purchase of artificial appliances for physical reconstruction alone is not permissible under the Federal act."¹³ As a result of this ruling nearly all the states make provision for purchasing artificial limbs in certain cases. Some states treat the expenditures thus made as loans to the disabled persons, while Massachusetts agrees to bear half

¹² Bulletin No. 104, Federal Board for Vocational Education.

¹³ Bulletin No. 77, Federal Board for Vocational Education.

the expense if the remainder is forthcoming from private sources.¹⁴

The successful completion of a course of training marks only the half-way stage in the process of rehabilitation. The next step is the placement of the worker—the finding of a job where he can test himself and his newly acquired skill. A few years ago placement was generally regarded as a more difficult problem than training. Employers were biased against physically handicapped persons, and it was not easy to persuade them that such persons were as efficient and dependable as other workers. Much of this early prejudice has now disappeared, however, as a result of the success of rehabilitation programs.

After a disabled worker has been re-trained, and suitable employment has been found for him, he must be followed up regularly for a number of months. The period of adjustment is difficult, and in most cases he is badly in need of encouragement and advice. It is to the state agent in charge of his case that he naturally turns. His training has been under sheltered and controlled conditions, but his employment is in direct competition with normal men and women. Only when he demonstrates his ability to meet such competition successfully may his rehabilitation be called complete, and his case closed.¹⁵

¹⁴ Bulletin No. 157, Massachusetts Department of Education.

¹⁵ Annual Report of the Federal Board for Vocational Education, 1921, p. 310 *et. seq.*

The plans which the states are required by law to submit to the Federal Board for its approval set forth in detail the kinds of rehabilitation to be used, methods of administration and supervision, courses of study, methods of instruction, qualifications of teachers and the manner of training them. State boards are given much greater leeway than in formulating plans for vocational education, because of the greater difficulty of standardizing procedure. The course of study differs for each person, and is determined by a great number of variable factors. The method of instruction likewise varies with each case. State plans were originally sent to the Federal Board annually; they may now be submitted on a three-year basis.

Because the service is so strictly personal, the cost of administration is very high. Special rehabilitation schools and classes are not practicable, and must give way to individual training. State supervisors of vocational education must visit schools, but state rehabilitation agents must visit individuals, and carefully guide their courses of study. It is not surprising, therefore, that the supervisory cost of rehabilitation is high. Nearly fifty per cent of the combined federal-state expenditures in 1927 was used for administrative purposes.¹⁶

¹⁶ Estimate of the Federal Board for Vocational Education, based upon state reports.

One of the most serious problems confronting the rehabilitation agencies, both federal and state, has been the difficulty of securing properly trained workers. The Federal Board made no attempt at the outset to establish hard and fast standards for state agents, for it realized the virtual impossibility of framing standards of training or experience that would be applicable to the new work. No one knew what type of previous training was most likely to fit a man for rehabilitation work, or what kind of education would prove most suitable. Many a state, freed from the usual necessity of meeting specific federal requirements in selecting its workers, promptly created a rehabilitation division and distributed the new jobs among the faithful henchmen of the political machine. The director of rehabilitation of one state is said to have boasted: "I have been given this job because I control the ——th Ward." Several years' experience under the Fess-Kenyon Act has given a clearer understanding of the kinds of education and experience most likely to prove of value, and the Federal Board has recently formulated standards for the guidance of co-operating state agencies. Among the desirable qualifications for state agents have been listed college education or its equivalent, good judgment, initiative, leadership, social mindedness, a technical knowledge of vocational rehabilitation, and a knowledge of occupations and training facilities. A number of these

standards are rather vague—necessarily so. Even now requirements cannot be made so specific as in the field of vocational education. It is possible, however, to enforce strictly some of the more definite requirements, and this the Federal Board has not done. As a result, vocational rehabilitation has become the football of politics in a number of states. In more than one instance entire rehabilitation staffs of long standing have been dismissed *en masse* because of political changes in higher offices.¹⁷ In this connection the experience of one Mid-Western state is illuminating. It first installed a group of politicians as rehabilitation workers, later replaced them with other politicians owing a different partisan allegiance, and finally abandoned the work altogether. Conditions are considerably worse in the rehabilitation field than in the realm of vocational education, especially with regard to the rank and file of the service. The difference is attributable in large measure to the greater ease of evading federal rehabilitation requirements.

Federal supervision is reasonably thorough. Each state is visited at least once a year, sometimes oftener. The federal agents become quite familiar with the work of the states, because of the comparatively small number of cases handled. Much of their time is spent in the field, talking with disabled persons in process of training. They are also required,

¹⁷ Cf. Sullivan & Snortum, *op. cit.*, p. 173.

of course, to audit state accounts. Unsatisfactory conditions existing over a considerable period are almost certain to come to their attention. An offending state is seldom forced to change its policies, however, if it respects the specific provisions of the law. The Federal Board is long suffering, and tries to better unsatisfactory conditions by means of advice instead of threats. As a result, the improvement in state standards has been very slow, but all appearance of federal dictation has been avoided. Thirty-five state rehabilitation directors were asked recently if federal supervision had in any way affected their standards, and nearly half of them replied in the negative. They all agreed, however, that no federal domination had ever been attempted.

When asked if the Fess-Kenyon Act had stimulated state activity, all but three of the thirty-five directors declared that the development of the work in their states was due in large measure to the incentive of federal aid. "No rehabilitation work was done here prior to the passage of the federal law," said one, "and I am confident that but for its passage our state would be without rehabilitation work today." Most of the other directors echoed his reply.

It is not necessary, however, to rely upon the opinions of state officials in order to show the effect of the federal subsidy upon the development of state programs of vocational rehabilitation. At the time

of the passage of the Fess-Kenyon Act only six states were carrying on activities which might be designated as vocational rehabilitation, though six others had rehabilitation laws on their statute books.¹⁸ Within a year the number of active states had risen to thirty-five, and has since increased to forty-one.¹⁹ Federal expenditures have mounted steadily, but every year the states have spent a dollar and a quarter or more of their own money for every dollar received from the federal government. The following table shows the growth of federal aid for rehabilitation:

*Federal Expenditures for Vocational Rehabilitation*²⁰

Year	Amount
1921	\$ 93,335.72
1922	318,608.12
1923	525,387.24
1924	551,095.56
1925	519,553.31
1926	578,847.33
1927	880,263.00

Much of the time of the federal agents is spent in advising the states instead of supervising them. When the work was first begun this service was of especial importance, for nearly all the states needed advice as to proper methods of administration, kinds

¹⁸ *Cf. supra*, p. 190.

¹⁹ Information supplied by the Federal Board for Vocational Education.

²⁰ Figures supplied by the Federal Board for Vocational Education.

of personnel, records, case forms, and a thousand other minor details. There are still many states, however, frequently in need of the friendly suggestions of the federal government. Sweeping changes in personnel as the result of political maneuvering make necessary the training of new staff members, and in this training the federal agents often have a hand. From time to time the state workers are brought together in sectional, regional and even national conferences called by the Federal Board for the purpose of securing a more widespread appreciation and adoption of the best practices in the field of rehabilitation.

Federal agents perform a real service by approaching the representatives of various forces whose help is necessary in the rehabilitation program. At times they visit trade union leaders to facilitate the acceptance of disabled persons as apprentices. They make contacts with representatives of industrial organizations for the purpose of spreading the idea of the employability of the handicapped. Often they arrange for the co-operation of social agencies doing allied work.

Like the Vocational Education Division of the Federal Board, the Rehabilitation Division devotes a considerable portion of its time to research. Since all the staff members, including the chief, are specialists in various phases of rehabilitation, they are expected to make intensive studies in their own

fields. The results of these investigations are then turned over to the states, and in this way a standard technique is gradually being evolved.²¹

Any one of a number of state agencies might contend with some logic that it should be made responsible for the administration of vocational rehabilitation. The Industrial Commission might well make such a claim, for example, because of its close connection with workmen's compensation activities and public employment services. The Department of Education, which directs vocational education in most states, might point out that rehabilitation is really an educational function—that it is, in fact, re-education. The Department of Public Welfare might show that it does a great deal of closely related work, often involving the same methods. There is, of course, the additional possibility of creating a separate department.

If left to their own devices, the several states would probably have tried all four of these plans. The federal government, however, gave them no choice. Section 3 of the Fess-Kenyon Act stipulated that "in order to secure the benefits of" federal appropriations, each state must "empower and direct the board designated as the State board for vocational education . . . to co-operate as herein provided with the Federal Board for Vocational Education in the administration of the provisions of this

²¹ Sullivan & Snortum, *op. cit.*, p. 175.

Act.”²² As a natural result, the work has been brought under the Department of Education in nearly all the states. A few commonwealths, of which Pennsylvania is the outstanding example, have vested control in the Department of Labor, though not necessarily in the Industrial Commission. Federal aid has been secured by designating the Rehabilitation Bureau as the agent of the State Board for Vocational Education. The only effect of this arrangement seems to be to complicate the handling of funds.²³

For a number of years the states and the federal government have both been at work in an effort to reduce the cost of rehabilitation per individual. In this attempt they have not been very successful. The average cost was two hundred and sixty-two dollars per case in 1923; four years later it was two hundred and fifty-five dollars. The 1927 figure is not high, however; it compares very favorably with the per capita figure for general or vocational education.²⁴ If rehabilitation succeeds, as it does in about fifty per cent of all cases, according to a reliable estimate,²⁵ it will not take many months for the re-trained worker to earn far more than the cost of his training. A number of estimates have been made of the

²² 41 Stat. L. 735.

²³ Sullivan & Snortum, *op. cit.*, pp. 164-9.

²⁴ Figures supplied by the Federal Board for Vocational Education.

²⁵ Sullivan & Snortum, *op. cit.*, p. 507.

savings effected in dollars and cents as a result of the rehabilitation programs of the federal government and the states. These estimates are predicated in part upon a few facts concerning the number of re-trained persons and their subsequent earnings, and in part upon a series of assumptions as to expected length of life and possible earnings in the absence of re-training. As statements of the monetary value of rehabilitation they are very nearly useless. Too many unpredictable factors complicate the problem. Vocational rehabilitation needs no such justification, however. It is clear that any activity which transforms hopeless, dependent cripples into happy, independent wage earners is a proper and profitable function of government. Broken material consumes only ground space, but broken men consume goods already produced.

CHAPTER IX

HYGIENE OF MATERNITY AND INFANCY

THERE is scarcely a phase of public health which has been so generally neglected as the welfare and hygiene of mothers and their babies. The work is primarily educational, and legislatures have never given generous support to the educational work of health departments. They will appropriate money to fight epidemics, but not to teach people how to prevent epidemics. They gladly provide hospitals where sick babies may be cared for, but they are loath to spend money to tell mothers how to keep their babies well. Legislators are not the only persons, however, who fail to appreciate the need for proper, expert care of mother and child before and after birth. Frequently the mother herself has no knowledge of the most elementary rules of hygiene, and is totally unaware of the consequences of her ignorance. Even among the better classes thousands of women who regularly consult their physicians concerning all other phases of their health make no attempt to secure medical advice for many months of this crucial period of their lives.

As a result, the maternal and infant death rates

in the United States have been and still are abnormally high. Among women between the ages of fifteen and forty-five—the child-bearing period—there are more deaths from accidents and diseases due to childbirth than from any other cause except tuberculosis. Recently the Children's Bureau of the Department of Labor prepared from the latest available census figures a statement of maternal mortality rates in twenty-two leading nations of the world. Only two nations made a poorer showing than the United States. A better record was made with regard to infant deaths, but even the infant mortality rate showed clearly the need for improvement.¹

The first bureau of child hygiene in the United States was organized in New York City in 1908, and made a part of the municipal health department. A number of states soon followed New York City's lead, and within thirteen years three-fourths of the states had given official recognition to the work of child hygiene.² Most of the state bureaus were seriously handicapped, however, by insufficient funds. In Missouri, for example, a director and a stenographer comprised the bureau's personnel. The legislature, having authorized the work, made no appropriation to carry it on.

Many persons became convinced that the welfare of the nation's mothers and babies was of such im-

¹ Baker, S. J., "Child Hygiene," p. 106.

² *Ibid.*, pp. 45-6.

portance as to justify the federal government in taking a hand. Several bills were introduced in Congress, only to fail of enactment by narrow margins. At last, in 1921, a bill designed "for the promotion of the welfare and hygiene of maternity and infancy" became law. This statute, popularly known as the Sheppard-Towner Act, provided for a subsidy over a five-year period of one million two hundred and forty thousand dollars annually—ten thousand to be paid to each state and the balance apportioned on the basis of population. The usual conditions were attached. The legislature of each state receiving federal allotments was required to accept formally the federal offer, designate or create a state board vested with adequate power to co-operate with the federal administering agency, and match federal funds above five thousand dollars.

A Federal Board of Maternity and Infant Hygiene was created by the Sheppard-Towner Act, composed entirely of ex officio members—the Chief of the Children's Bureau of the Department of Labor, the Surgeon General of the Public Health Service of the Treasury Department, and the Commissioner of Education of the Department of the Interior. This board was charged with general supervision of the law, but the actual details of administration were entrusted to the Children's Bureau. Each state was required to submit to the Children's Bureau detailed plans for educating women to take proper care of

themselves and their babies. Federal funds were not to be used for land or buildings, nor "for the payment of any maternity or infancy pension, stipend, or gratuity."³

A separate division of the Children's Bureau was organized to administer the Sheppard-Towner Act, and placed in charge of a medical director. Three physicians, two nurses, an auditor and a few clerks comprise the staff of this Division of Maternity and Infancy. All have their headquarters at Washington, though much time is spent in the field. The Board of Maternity and Infancy meets but three or four times a year, to act upon the plans submitted by the states. Unlike the Federal Board for Vocational Education, it has set up no standards for state guidance. The states are required to use federal and matched funds "in promoting the welfare and hygiene of maternity and infancy," but no limitations are placed on state action except those imposed by Congress. Any plans submitted by the states, regardless of what they contain, are practically certain to meet with federal approval unless they fail to conform to the letter of the law. Nor is conforming to the letter of the law a difficult matter. The Sheppard-Towner Act is worded in very general terms, and makes no attempt to establish proper methods of procedure. Miss Grace Abbott, Chief of the Children's Bureau, made clear the po-

³ 42 Stat. L. 224.

sition of the Board of Maternity and Infancy when, speaking before the House Committee on Interstate and Foreign Commerce, she said: "We have conceived that our function was to be a clearing house of information for the States, in the first place getting from one State to another the experiences of each and trying to give information as to new discoveries in this field. We have also felt that it was our duty to make sure that the money made available by the Federal Government was spent for the purpose for which it was appropriated, and we have carefully audited expenditures with a view to preventing any misuse of the funds. *Except for that, the bureau has not functioned.*"⁴

The states are given a freer hand, therefore, in formulating and executing their policies than under any of the other recent federal aid laws. This difference is due partly to the wording of the Sheppard-Towner Act, which directs the Federal Board to approve any state plan "in conformity with the provisions of this Act and reasonably appropriate and adequate to carry out its purposes." It is also due in part to the policy of the Federal Board, which believes that the work does not readily lend itself to the establishment of rigid standards. Greater freedom of state action has not resulted in a greater diversity of state programs, however. Every state

⁴ Hearing before the House Committee on Interstate and Foreign Commerce concerning the extension of the Sheppard-Towner Act, 69th Congress, 1st Session, Jan. 14th, 1926.

plan submitted for federal approval contains distinctive features designed to meet local needs; but the essentials of nearly all the state programs are the same. The similarities are more striking than the differences. Annual conferences of state directors initiated by the Children's Bureau have done much to promote a unified program.

Practically every state makes use of the device known as the "child health conference." These "conferences" are demonstration meetings held in the local communities by state doctors and nurses for the purpose of interesting mothers in the care of their children. Informal talks are given, motion pictures depicting health work are shown, and children are examined for physical defects. In some cases the use of a properly equipped truck—the "healthmobile" or "health caravan"—has proved effective. One purpose of this itinerant health work is to stimulate the local communities to establish and support their own permanent child-health centres, accessible to all persons in need of instruction regarding the care and welfare of their children.

The attempt is also made to demonstrate the value of maternity and infancy work to local communities by sending a nurse to each community for a specified period to initiate a maternity and infancy program. Even more frequently the states co-operate with their communities in the employment of public health nurses to carry on a general public health

nursing program, including maternity and infancy work. Under this plan the share of the expense to be borne by maternity and infancy funds is prorated according to the time given to this phase of the program. Such an arrangement is common in Missouri, Mississippi, Alabama, California, Maryland, Texas, Virginia and a number of other states. After a demonstration of this kind a community often takes over the work and finances it from local funds.

Home visits form an important part of the work of the child hygiene nurses. These visits are informal, and furnish mothers with excellent opportunities to ask questions and discuss their problems. They also provide opportunities for nurses to urge the necessity of correcting physical defects, and to suggest that the family physician be consulted. Doctors and nurses paid in part from Sheppard-Towner funds do not go about the country making the lame to walk and the blind to see; if they did, they would speedily have upon their heads the maledictions of every practicing physician. They merely point out the need for a physician's services when such a need exists, and suggest a visit to the family doctor.

The need for medical attention during pregnancy, and particularly during confinement, is constantly stressed. Surprisingly large numbers of women have no concept of the need for a physician's care during this critical period, and must be taught that proper prenatal supervision lessens the dangers of

maternity and promotes the health of mother and child. The state forces find it no easy matter to arouse the interest of expectant mothers, but far more difficult is their task of finding the expectant mothers whose interest should be aroused. Some names are secured from neighbors, a few from physicians, some from the lists of women who are already mothers. But at best the task is a tedious one. There is no magic formula.

Most states have classes for the instruction of mothers. In 1925 these classes were attended by more than twenty-two thousand women. In twenty-four states so-called "little mothers' classes" have been established. While these classes are designed primarily to teach the next generation of mothers the proper care of children, they have an immediate effect in improving the hygiene of the older girls who must often devote a large portion of their time to caring for their younger brothers and sisters. In at least one state infant care has become a part of the regular educational program. Some Sheppard-Towner money is used for the purchase of silver nitrate, which is furnished to doctors and midwives for the protection of babies' eyes.

One of the most serious problems confronting the state forces in several sections of the country is the supervision and training of midwives. An astonishingly large percentage of births in this country are attended by midwives, the figure running as high as

fifty per cent in some states. These women are for the most part ignorant and slovenly, with no understanding of the most elementary rules of hygiene. In many of the Southern states the midwives, chiefly negroes, still follow the practices of slavery days, not even omitting the semi-savage incantations they have known since childhood. Among the foreign elements the midwives are also numerous, though usually more competent. In a few states, of which New Jersey, Pennsylvania and New York are notable examples, many of the midwives are well trained women, graduates of midwifery schools. In most sections, however, they are illiterate and superstitious, not lending themselves readily to training. Yet training must be given them, if they are taught nothing except the importance of cleanliness. During 1926, classes for midwives were held regularly in at least nineteen states. It is useless to prohibit them from practicing. Any woman has the right to call in a neighbor to help her during confinement, and the neighbor then becomes a midwife. Moreover, there are many communities without physicians, and it would be worse than folly to deny to the people of those communities the services of midwives. Even in more thickly settled sections midwives are numerous, and will doubtless continue to flourish. They perform a real service for the poor. As one state director of child hygiene said: "You may talk of abolishing the midwives when you can

find a sufficient number of doctors who will give up days of their time, patiently waiting for nature to take its course, at five dollars per case."

In one state, Massachusetts, the midwife has no legal existence. Yet she is required to report all births attended, and is prosecuted for failure to do so. Missouri requires all midwives to take the regular physicians' examination in obstetrics, and then details a special nurse to teach the rudiments of hygiene to negro midwives, many of whom are unable to read and write. Most states require local registration, and occasionally a license must be obtained, to be issued only after some sort of examination has been passed. Laws of this nature are poorly enforced, however, and many midwives continue to practice without regard for state regulations.

It is obvious that any comprehensive survey of child hygiene work must be based upon accurate vital statistics. Nearly all the states, therefore, have given some attention to improving their methods of registering births and deaths. Thirty-six states now have satisfactory birth registration laws, and forty-two make suitable provision for registering deaths. A number of the state acts are directly attributable to the influence of the federal government.

Usually physicians are in charge of the state programs. In nine states, however, the work is directed by nurses, while in six others the state directors are

neither physicians nor nurses. It is customary to have one or more physicians on each state staff, but nine states depend upon the part-time services, often voluntary, of private practitioners.

It is probably not far from the truth to say that the measure of success of state maternity and infancy programs is in direct ratio to the measure of interest of the local physicians. If they are hostile, they will probably discredit the work in their respective communities. On the other hand, if they place upon the work the stamp of their approval, the confidence of the lay public is easily gained. Many physicians have at first displayed considerable antagonism. They have looked upon the state forces as rivals, competing for a portion of their business. The first task of every state child hygiene department, therefore, ought to be the education of the medical profession. Physicians should be made to realize that the work of the state is purely educational, and that when the state forces properly conduct their campaigns the result will be more work for the doctors instead of less.

Unfortunately, many states have not fully appreciated the need for winning the confidence of the medical profession, and have planned and executed their programs in each community without sufficient regard for the attitude of the community's doctors. As a result they have at times been bitterly attacked by local physicians, who little understood the work

and cared nothing for it. Other states, wiser in their day and generation, have insisted upon the approval of the county medical society before beginning maternity and infancy work in any county. Thus they have secured in advance the official stamp of medical approval for their work. South Carolina, with such a requirement, has failed to secure the approval of but one county society. Missouri has been even more fortunate. Some states which have counties without medical societies or with societies that fail to function try to secure the approval of the local physicians as individuals before initiating their work.⁵

The federal audit of state accounts is made by a trained auditor, who visits every state and goes over its books, asking no questions as to the wisdom of state policies. In addition, someone from Washington visits practically every state at least once a year and inspects the work that is being done. This is accomplished despite an insufficient number of inspectors. Occasionally a month or even longer is spent in a state, especially when an inexperienced state personnel is in need of guidance. Usually, however, only four or five days can be spent in any

⁵ The above description of state maternity and infancy work has been drawn from a large number of sources, including many personal interviews. Reference may be made, however, to the following: Marriner, Jessie L., "Midwifery in Alabama," in "Public Health Nurse," March, 1926; Davis, Wm. H., "Stimulation of Birth Registration," Children's Bureau Publication No. 157; Hearing before the House Committee on Interstate and Foreign Commerce, 69th Cong., 1st Sess., concerning the extension of the Sheppard-Towner Act, Jan. 14, 1926; Annual Report of the Children's Bureau, 1925, on the Administration of the Sheppard-Towner Act, Publication No. 156, pp. 5-19; Baker, S. J., *op. cit.*, pp. 111, 116.

one state, and therefore the Children's Bureau is able to secure but a sketchy notion of what is being done. It is probably less familiar with the work of the states than any other federal bureau administering a subsidy law. Therefore it is obliged to place more dependence on the announced policies of the states. State plans are carefully scrutinized, but many of the states are practically placed on their honor to carry out the plans they formulate. The one exception to this general statement is the federal fiscal audit, which is very thorough. It will be remembered that the other federal bureaus depend upon the same men and women to inspect state activities and audit state accounts. As a result, most of the audits are very nearly worthless. The Children's Bureau's plan of employing a trained auditor to visit every state, leaving the regular inspectors free to examine the operation of state plans, insures a thorough examination of state accounts which would not otherwise be possible. Moreover, it furnishes a double inspection of state activities, because the auditor, though charged with the examination of fiscal records, is instructed to report any questionable practice that may come to her attention.

The deliberate adoption by the Children's Bureau of a *laissez-faire* policy has naturally received the widespread approval of state co-operating officials. State health officers and state directors of child hygiene bureaus speak in glowing language of the

Children's Bureau and its work. Forty state directors were asked recently if the federal government attempted to interfere with them in any unreasonable manner, and every one replied unhesitatingly that there was not the slightest indication of attempted federal domination.

Yet the subsidy for maternal and infant hygiene has been criticised more severely than any other form of federal aid. The charge has been freely made, without any regard for accuracy, that the Children's Bureau was forcing its own policies upon the states, and compelling them to accept standards totally unsuited to their needs. Stories have even been circulated of federal officials forcing their way into private homes and compelling parents to accept federal notions of child hygiene.

Speaking in 1926 before the House Committee on Interstate and Foreign Commerce, the President of the League of Catholic Women of Boston, Mass., declared:

"In America we believe that the child belongs to the parent; pagan philosophy says that the child belongs to the state. The more that you go on and try to legislate from Washington, telling the mothers and fathers in Massachusetts that 'your children are going to be controlled from Washington,' you are coming back to a very dangerous paganistic principle."

This statement was not permitted to remain unchallenged. The hearing continued as follows:

MR. NEWTON (a Congressman from Minnesota): "I have not yet been advised that through the Federal aid the Federal gov-

ernment is in any way interfering with child training in the home. If you have any evidence of that kind, I think the committee would like very much to have it."

MRS. SLATTERY (President of the League of Catholic Women of Boston): "Well, evidence in this way, that we in Massachusetts—as I say, we are very proud of the fact that we do not take for granted and trust too much—we like everything in black and white, and in these bills emanating from Washington there is so much generality—perhaps they have not done it as yet, but there seems to be, to my mind, as I have been studying it—and I have made quite a study of these Federal bills emanating from certain sources—it seems that it is not what they say they are going to do, but they leave such general clauses that we are very jealous, and we would rather protect ourselves. No, I have not any positive proof, but I do not have any doubt but what they would."⁶

Opposing federal aid for maternal and infant hygiene because the child belongs to the parent is like objecting to federal aid for highways because the automobile belongs to its owner. Yet ridiculous charges and glaring misrepresentations are constantly made by the enemies of the Sheppard-Towner Act. An editorial appearing in the November, 1923, issue of the *Illinois Law Review* stated that the Sheppard-Towner Law "provides for the pensioning of and rendering monetary aid to indigent mothers."⁷ The act itself specifically stipulates that federal and matched funds may not be used "for the payment of any maternity or infancy pension, stipend or gratuity."⁸

⁶ Hearing before the House Committee on Interstate and Foreign Commerce, 69th Cong., 1st Sess., concerning the extension of the Sheppard-Towner Act, Jan. 14th, 1926, pp. 22-5.

⁷ Vol. 18, p. 204.

⁸ Sec. 12.

Even the American Medical Association has taken up the cudgel against the child hygiene work of the federal government, basing its arguments chiefly upon the philosophy of the states rights school. It makes no charges of interference with individuals, but claims that the sovereign powers of the states are or may be menaced. One thing is quite obvious; the American Medical Association is not concerned with states rights. It is an organization representing the physicians of the country, and is not likely to manifest a marked interest in legislation unless it believes the physicians are in some way affected. Probably its opposition is due to a fear that the state child hygiene boards will set about curing ailments and correcting physical defects in direct competition with private practitioners. The state forces have been very careful, however, not to interfere with the practice of private physicians, and have succeeded in winning the confidence of many doctors who were at first skeptical or openly hostile. Hundreds of county medical associations have endorsed the child hygiene work of the states, and a number of state medical societies have put themselves on record as favoring its continuance. So has the Conference of State and Provincial Health Authorities of North America. There is reason to believe, therefore, that the American Medical Association, in its opposition to federal aid, does not represent the medical profession.

For several years the Sheppard-Towner Act has been the chief target of all members of Congress who oppose the federal aid principle. Every suggestion that the work be extended for another period of years beyond 1927, the last year of the original appropriation, has met with vigorous opposition. Senator Reed of Missouri recently objected to "a bunch of unmarried women going about the country trying to tell real mothers how to raise their babies." His words have been echoed in many sections. A little time afterward, former Governor "Jim" Ferguson of Texas took issue with the work of child hygiene. "It is supposed to teach Texas mothers how to have babies," he said, "in spite of the fact that the mothers of this state have made a success of having babies for over one hundred years." One is reminded of the story of the social worker who visited a mother of the slums. "So you're tryin' to tell me how to raise children," she cried. "Me that's buried seven!"

So determined was the opposition of some members of the Sixty-Ninth Congress that early in 1927 the friends of the Sheppard-Towner Act found it necessary to compromise. An extension of the work until June thirtieth, 1929, was authorized, on condition that after that date the federal government should withdraw from the field.⁹ A later Congress

⁹ Public No. 566, 69th Cong., Approved Jan. 22, 1927.

is still at liberty to sanction the continuance of the work after 1929, but is not likely to do so.

It is a curious fact that although the Sheppard-Towner Act passed both houses of Congress by a larger majority than any other federal aid statute for which a vote is recorded,¹⁰ and has since been so administered as to give the states greater freedom of action than under any other subsidy act, yet it has aroused the most widespread and determined opposition. No other federal aid law has been so consistently misrepresented, nor so frequently accused of making possible federal domination. No other subsidy act, with the exception of a single war-time emergency statute,¹¹ has been obliged to contemplate its probable demise at no distant date. Moreover, the Sheppard-Towner Act is the only federal aid statute whose constitutionality has been contested in the courts.¹²

There can be little doubt that the federal subsidy has greatly stimulated child hygiene work in the

¹⁰ The National Defense Act of 1916 passed both houses with overwhelming majorities, but it was a measure concerned primarily with the strengthening of the army at a time when war was imminent, and its subsidy feature was of minor importance. The vote on the Sheppard-Towner Act is found in the Congressional Record, v. 61, pt. 4, p. 4216 (Senate vote), and v. 61, pt. 8, p. 8037 (House vote).

¹¹ The Chamberlain-Kahn Act of 1918, providing for the prevention, control and treatment of venereal diseases. Part of the fund under this statute was to be used for the purpose of "assisting the various States in caring for civilian persons whose detention, isolation, quarantine or commitment to institutions may be found necessary for the protection of the military and naval forces of the United States against venereal diseases." 40 Stat. L. 886.

¹² Cf. *infra*, p. 256 *et seq.*

states. During the first six months following the passage of the Sheppard-Towner Act forty-one states accepted its provisions and took steps to meet federal requirements. The number of co-operating states is now forty-five. Many commonwealths whose child hygiene bureaus were so handicapped by lack of funds in 1921 as to be practically worthless have since made enviable records. Even some of the states which have not accepted the federal offer have been obliged to justify their position by inaugurating comparable programs of their own. The legislature of Massachusetts, for example, made its first separate appropriation for maternal and infant hygiene after it had refused the terms of the Sheppard-Towner grant. Maine's state program was similarly strengthened.

The directors of child hygiene of forty of the forty-five co-operating states were asked if federal aid had stimulated their work. They replied emphatically in the affirmative, without a dissenting voice. "No money was appropriated by our state legislature for the welfare of mothers and babies before the passage of the Sheppard-Towner Act," said one. "Federal funds have enabled us to double our staff and increase our field of activities," declared another. "Without federal money we should be able to accomplish little," was another comment. The replies differed from one another only in phraseology.

Each year the amount of federal funds paid to the states for maternal and child hygiene has increased as state programs have developed and state legislatures have made additional appropriations. Some states have accepted their full share of the federal subsidy, and would be glad to match still larger amounts. Nearly half of the co-operating states, however, have qualified for only a portion of their allotments. The following table shows the growth of federal payments to the states, and also the maximum amounts available each year from Sheppard-Towner funds:

*Amounts Available to States from Federal Maternity and Infancy Funds, and Amounts Accepted*¹³

Year	Maximum amounts available from federal appro- priation	Amounts accepted by the states	Per cent accepted by states
1922	\$ 477,500.00	\$316,554.02	66
1923	1,190,000.00	716,222.40	60
1924	1,190,000.00	877,122.04	73
1925	1,201,725.96	921,028.73	76
1926	1,201,725.96	939,711.63	78
1927	1,201,725.96	899,824.71 ¹⁴	74 ¹⁴

The forty state directors of child hygiene whose opinions have previously been cited were asked whether federal supervision had in any way affected their standards. A large number of negative answers might well have been expected, for the

¹³ Fifteenth Annual Report of the Chief of the Children's Bureau.

¹⁴ The 1927 total will eventually be higher, as the 1927 funds are available for acceptance until June 30th, 1928.

Sheppard-Towner Act is couched in general terms, and the Children's Bureau has made no attempt to go beyond the letter of the law. It has suggested improved practices, but has never made their adoption mandatory. Yet twenty-seven of the forty state officers replied that federal advice and criticism had bettered their standards. Two of the remaining thirteen were uncertain.

As in most branches of state administration, politics play an important part in several state bureaus of child hygiene. State directors and staffs are sometimes chosen with little or no regard for training or experience, and are sometimes dismissed without reference to the quality of their work while in office. The Children's Bureau makes no attempt to prevent these political manipulations, though it naturally looks upon them with disfavor. Federal funds are paid to the states regardless of the qualifications of state directors and state workers, and have never been withheld except to force compliance with the letter of the law.

Like most of the other federal bureaus administering subsidy laws, the Children's Bureau devotes much of its time to research work. Studies have been made of various phases of maternal and infant hygiene, such as community control of rickets, the relation of an attendant at birth to neonatal and maternal mortality, the effect of posture on physical fitness. Technical experts representing medical so-

cieties or the medical schools of universities frequently co-operate in making these investigations, the results of which are then passed on to the states.¹⁵

Many persons criticise the Sheppard-Towner Act because it entrusts the administration of child hygiene work to the Children's Bureau. They point out that child hygiene is a public health problem, and that the federal government has already placed most of its public health work in charge of another agency—the Public Health Service of the Treasury Department. Why, they ask, should the enforcement of federal health policies be left to two separate and largely unrelated bureaus in two different departments? From the standpoint of logical organization it is difficult to justify the present arrangement. Maternal and infant hygiene are undoubtedly phases of the broader problems now handled by the Public Health Service. But there are a number of practical reasons why the Children's Bureau is best fitted to administer the Sheppard-Towner Act. Its studies first called attention to the alarmingly high maternal and infant mortality rates in the United States, and public interest was first aroused as a result of its efforts. It has been a pioneer in the field. Moreover, there is a real danger that if the work were transferred to the Public Health Service it might be

¹⁵ Report of the Children's Bureau, 1925, on the Administration of the Sheppard-Towner Act, Publication No. 156, p. 64 *et seq.*

subordinated to other activities of the Service. Many physicians connected with the Public Health Service criticise the Sheppard-Towner Act for picking out a single aspect of health work and offering federal aid for it alone. They now forget that maternal and infant hygiene are probably the most neglected phases of public health activities, and for that reason are in need of special treatment. If they were placed in control of child hygiene, would they acquire a better appreciation of the problem? In time they might, but there seems to be no good reason for taking the chance. The widely advertised fact that the Director of the Children's Bureau is not a physician is of no significance. A physician is in charge of the Division of Maternity and Infancy, which administers the Sheppard-Towner Act, and her advice is followed in all technical matters by the Chief of the Bureau. Moreover, the Children's Bureau has won the confidence and support of the state health authorities, though at the expense, it must be admitted, of adequate inspection. As one state health officer recently declared: "I don't care what name you give to the federal agency in charge of child hygiene, as long as Grace Abbott¹⁶ is at its head."

The success or failure of maternal and infant hygiene programs will ultimately be reflected in the mortality rates, but no marked change in the trend

¹⁶ Chief of the Children's Bureau.

of these figures should be expected for a number of years. The work is primarily educational, and involves a change in the habits of millions of persons. Obviously time is required. Many of the opponents of the Sheppard-Towner Act, however, have called attention to the fact that maternal mortality figures have remained practically at the same level, and that the infant death rate has declined but slowly, since the passage of the federal law. They have insinuated that federal aid for child hygiene must be deemed a failure because it has effected no considerable immediate reduction in death rates.¹⁷ With equal reason they might contend that we should abandon the attempt to reduce automobile accidents should the figures at any time indicate an increase in such mishaps. The following table shows the trend of maternal and infant mortality in the United States:

Trend of Infant and Maternal Mortality in the U. S. Birth-Registration Area ¹⁸

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
Infant Mortality ¹⁹	100	101	94	101	87	86	76	76	77	71	72
Maternal Mortality ²⁰	6.1	6.2	6.6	9.2	7.4	8.0	6.8	6.6	6.7	6.6	6.5

The main features of the Sheppard-Towner Act and its administration can be summarized in a few words. Such a summary is not without value, be-

¹⁷ Hearing before the House Committee on Interstate and Foreign Commerce, 69th Cong., 1st Sess., concerning the extension of the Sheppard-Towner Act, Jan. 14, 1926, pp. 14-5.

¹⁸ Figures compiled by Vital Statistics Division, Census Bureau.

¹⁹ Deaths of children under one year per one thousand live births.

²⁰ Deaths of mothers from causes connected with childbirth per one thousand live births.

cause the federal subsidy for maternal and infant hygiene differs in a number of respects from other forms of federal aid. The act itself is phrased in general terms, and makes no attempt to set up state standards. Nor has the Federal Board of Maternity and Infant Hygiene seen fit to supplement the few requirements of the law with standards of its own making. Federal approval is withheld from state plans only if they fail to comply with the specific provisions of the federal statute—if, for example, they contemplate the use of federal funds for the purchase of land or the payment of pensions. Federal supervision of state activities is largely nominal, but the fiscal audit is unusually thorough. State health authorities are practically unanimous in their approval of the Children's Bureau and its policies; yet the Sheppard-Towner Act has aroused so much opposition that after 1929 the work will probably be discontinued.

A few other subsidies are given to the states from the federal treasury, but most of them are relatively unimportant. They involve but small amounts, and sometimes carry with them no adequate provisions for federal supervision. A few are merely of historic interest. Others are granted sporadically, and are not a part of any definite program.

In 1879 Congress passed an act which provided that if any state or territory should take a census

midway between the decennial censuses of the United States, on schedules and forms similar to those used by the United States Census Bureau in taking the federal census, half the expense would be borne by the federal government. The Secretary of the Interior was directed to determine which states were fulfilling the requirements of the law, and to authorize payment to those earning federal allotments. In order to protect the federal government against wasteful expenditures, stipulation was made that any state or territory taking a census at the prescribed time and in the prescribed manner should receive, not one-half of the amount certified by the officials of the state or territory, but "a sum equal to fifty per centum of the amount which was paid to all supervisors and actual enumerators within such State or Territory between the two United States censuses next preceding."²¹ This act seems to have passed almost unnoticed. In 1885 three states and two territories availed themselves of its provisions and received subsidies from the federal government, but since that time no state appears to have considered the federal offer sufficient to induce it to take a census on its own initiative under federal direction.²²

Seventy-five thousand dollars is annually appropriated to the Public Health Service, to enable it to

²¹ 20 Stat. L. 480.

²² Correspondence, U. S. Bureau of the Census.

co-operate with selected counties in the several states in general health work. The Bureau of Plant Industry administers a small subsidy granted to the states for the purpose of aiding their fight against blister rust. A portion of the annual appropriation for the Bureau of Agricultural Economics is contributed toward the salaries and expenses of marketing agents co-operatively employed by the federal and state governments. Federal aid is also given for the eradication of the foot-and-mouth disease and for arresting the ravages of the pink bollworm and other pests. Every year money is contributed in support of state homes for disabled soldiers and sailors of the United States. These appropriations are relatively small, and their administration involves no unusual features.

CHAPTER X

THE FUTURE OF FEDERAL AID

“THE reduction of federal aid payments to the states is more important than tax reduction or United States adherence to the World Court.” This statement, made by President Coolidge in the fall of 1925,¹ at a time when tax reduction and World Court adherence were among the chief features of his program, is a sufficient indication of his attitude toward the subsidy system. Moreover, the President is not alone in his opposition. The rapid growth of federal aid has forced it upon the attention of men in public life, and has subjected it to the attacks of a host of critics. Former Governor Lowden, of Illinois, expressed the views of many when he declared: “There is scarce a domain in the field of government properly belonging to the municipality or the state which the federal government is not seeking to invade by the use of the specious phrase ‘federal aid.’ . . . This rapid extension of federal administration not only means greatly increased expense because of duplication of efforts, but it means

¹ “Phila. Public Ledger,” Nov. 12, 1925.

the gradual breaking down of local self-government in America."²

Nor are the foes of the subsidy system found only in the ranks of the Republican Party. One of its severest critics is that staunch Democrat, Governor Albert C. Ritchie of Maryland. "The system ought to be abolished, root and branch," he declared in 1925, urging that the federal funds "which it entails ought to be stricken from the Federal Budget, and this money . . . left in the States for the States to use for their own local needs and purposes, in such manner as their people will."³

These men have roused a considerable section of public opinion against federal aid. Emphasizing the rights of the states and the importance of local self-government, they have led a determined, though for the most part unsuccessful, opposition against further Congressional appropriations. Their contentions bear a strange resemblance to the states' rights arguments of a political school long dead. Speaking on the floor of the Senate in 1921, Senator King of Utah declared: "There was a time when the states possessed that pride which would have led them to resist these attempts to influence their local affairs and to refuse the benefactions which come from the treasury of the United States."⁴ And

² Convocation Address, University of Chicago, June, 1921.

³ Address before the Penna. State Chamber of Commerce at Harrisburg, Oct. 15, 1925.

⁴ "Cong. Record," v. 60, pt. 3, p. 3046.

four years later, in his annual message of 1925, the President saw fit to deliver a tirade against federal aid, saying in part: "Local self-government is one of our most precious possessions. . . . It ought not to be infringed by assault or undermined by purchase."

When men begin to talk about the danger of infringing the rights of self-government, they usually mean that they fear for the special interests of the sections they represent. They seldom go forth to do political battle for the sake of abstract political theories. The statesmen of the ante-bellum South talked much of states' rights; but they were trying to protect the special interests of the cotton-growing states. So when the statesmen of the new generation invoke the great god Demos to protect the people against the fearful consequences of a rising tide of nationalism, one may be pardoned a cynical glance to learn what section or sections they represent, and whether special interests may not be at stake.

An analysis of all the recorded votes in Congress on the several federal aid statutes was made by Mr. Eugene F. Morgan, of the University of Pennsylvania.⁵ This study shows that the Congressional opposition to nearly all the subsidy laws centered in the East—New England and the Middle Atlantic States. Representatives from this section cast two-

⁵ Cf. Wharton School Reports.

thirds of the total negative House vote against the Federal Aid Road Act of 1916, and furnished an even larger percentage of the total votes cast against the Highways Act of 1921. In the House they provided nearly half of the poorly-organized opposition to the Sheppard-Towner Act.

A number of other interesting facts are made clear by Mr. Morgan's study. It is obvious, for example, that a Congressman's attitude toward federal aid is determined almost entirely by the wealth and density of population of his constituency, and practically not at all by his party affiliation. Both parties united to pass the 1916 and 1921 statutes granting federal aid for highway construction, but urban members of Congress, regardless of party, united to vote against the two acts. Congressmen from wealthy districts furnished more than their share of the opposition. In 1916 the urban⁶ congressmen, controlling but fifty-five per cent of the total vote cast, were responsible for ninety per cent of the negative ballots; while in 1921, still controlling about fifty-five per cent of the total vote, they registered eighty-two per cent of the ballots cast in opposition. The effect of a constituency's wealth upon its Congressman's attitude toward federal aid is well illustrated by the following table, based upon the vote in the House of Representatives upon the Federal Aid Road Act of 1916:

⁶ Mr. Morgan defined an urban county as one containing a city with a population of fifteen thousand or more.

House Vote by Wealth of County

County Wealth ⁷	Number of Representa- tives	Per Cent	Per Cent
		Voting Aye	Voting Nay
0-\$500,000,000	279	89%	11%
Over \$500,000,000	85	42%	58%

This vote analysis is highly significant. It shows that a new states' rights school is in process of development in this country—a school whose adherents are drawn chiefly from the wealthy, urban, industrial East. Yet the East is not opposed to the principle of federal aid. Its spokesmen have not hesitated to abandon their objections to the subsidy system like so many outworn garments whenever a different course of action seemed to promise greater gain. Its representatives in Congress voted almost solidly for the Weeks Law of 1911 and the Fess-Kenyon Act of 1920, two federal aid statutes designed primarily to benefit the industrial sections of the country. States' rights is not a principle; it is a policy to be adopted at such times and in such places as offer momentary advantage. And so when highways or agricultural extension work are under consideration, the East becomes vitally interested in state sovereignty. Through its representatives it declares itself the protector of the liberties of the

⁷ The wealth of each county was determined by taking the assessed value of its real property, as given in "Wealth, Public Debt and Taxation, 1922," and weighting it in accordance with the census figures giving "Percentage of true value of real property and improvements represented by the assessed value."

people, which somehow are conceived as being the special prerogatives of the states. Fear is expressed that a rapacious federal government may seek to transfer "all the powers of local self-government to remote and irresponsible bureaus in Washington."⁸ The implication is subtly made that the state legislatures represent the people, while the national Congress does not. The states are pictured as the jealous guardians of the civil liberties which the federal government is constantly striving to destroy.

Evidently the East believes that if most forms of federal aid are continued it will be the loser. Presumably the rest of the country believes that it has something to gain from an extension of the subsidy principle, for its representatives have supported nearly all the subsidy laws introduced in Congress. The reason for this sectional division of opinion is obvious. Federal revenues are derived chiefly from the wealthier states, from the states best able to contribute to the support of the national government. Federal subsidies, however, are apportioned for the most part on the basis of population. The natural result is that some states receive in federal aid far more than they pay in to the federal treasury, while others receive far less. Federal aid, therefore, results in a transference of wealth from the richer to the poorer states.

⁸ "St. Louis Post-Dispatch," Editorial, March 19, 1922.

This fact furnishes an adequate explanation of the attitude of the wealthy, urban, *creditor* East. It also provides the opponents of the subsidy system with an argument which they have not been slow to advance. Federal aid, they contend, is economically unsound, because, in the words of President Coolidge, "we impose unfairly upon the strength of the strong, and encourage the weak in their weakness."⁹ Figures have been tabulated by the distinguished Governor of Maryland to show the extent of this "imposition." The most significant of these tables is reproduced on page 244.

Governor Ritchie's figures are not entirely accurate. The total amount of federal aid paid to the states during the fiscal year 1924 was \$128,067,312.27, and not \$92,575,834.30. The error in no way invalidates the Governor's reasoning, however. In fact, the revised figures probably serve to emphasize his point. The conclusions he draws from the table presented above are so interesting as to merit quotation at length.

"Is there not," asks Governor Ritchie, "indeed *must* there not be something vicious about a system under which from one set of three States one State gets back in Federal Aid from the Government *over 300 per cent* and the other two *nearly 200 per cent* of the whole amount they, respectively, pay the Government in income taxes; when from another set of

⁹ Memorial Day Address at Arlington, 1925.

*Income Tax Payments and Federal Aid Received*¹⁹

State	Income Taxes Paid 1924	Federal Aid Received from Government	Percentage of Income Tax Pay- ments Returned to States as Fed. Aid
Nevada	\$581,492.18	\$1,845,945.98	317.45
North Dakota ..	771,387.02	1,487,558.96	192.88
South Dakota ..	1,169,750.72	2,094,133.10	179.02
New Mexico ...	890,835.06	787,170.90	88.36
Wyoming	1,595,540.08	1,347,850.58	84.48
Idaho	1,271,318.63	955,638.10	75.17
Arizona	1,591,667.27	1,060,520.70	66.63
Montana	2,060,349.38	1,003,638.56	48.71
Mississippi	4,008,798.72	1,849,120.76	46.13
Utah	2,937,172.54	1,079,708.04	36.76
Alabama	7,984,248.70	2,572,627.10	32.22
Arkansas	5,431,632.83	1,343,181.44	24.73
Oklahoma	11,028,491.98	2,595,645.99	23.54
Iowa	12,854,337.96	2,830,603.29	22.02
Texas	28,295,285.81	6,154,965.59	21.75
Georgia	13,869,531.55	2,731,417.96	19.69
Oregon	8,242,145.27	1,613,605.15	19.58
South Carolina ..	7,544,042.97	1,464,146.48	19.41
Tennessee	11,943,033.92	2,130,206.36	17.91
Virginia	16,048,299.83	2,794,750.45	17.41
Kentucky	14,284,640.29	2,408,771.01	16.79
Kansas	17,323,184.44	2,828,686.50	16.33
Nebraska	7,458,788.40	1,200,241.01	16.21
Vermont	2,935,562.31	396,178.72	13.50
Florida	8,005,449.14	955,463.95	11.94
Louisiana	13,400,178.10	1,568,478.76	11.70
Indiana	26,384,368.37	3,017,206.33	11.44
North Carolina ..	18,173,156.85	1,960,496.10	10.79
Colorado	11,543,616.03	1,136,038.21	9.84
New Hampshire ..	4,038,467.48	386,808.60	9.58
Maine	8,978,879.87	854,541.35	9.52
Missouri	44,116,410.10	4,144,134.74	9.39
Minnesota	23,855,584.21	2,175,051.02	9.12
Wisconsin	27,215,717.70	2,136,407.65	7.85
Washington ...	14,723,370.45	957,172.44	6.50
West Virginia ..	14,386,962.07	903,086.40	6.28
Delaware	9,127,303.62	495,940.38	5.43
Ohio	95,412,405.37	4,266,891.85	4.47
Illinois	161,072,008.68	5,583,318.93	3.46
California	92,401,441.98	3,007,775.11	3.26
Maryland	25,562,203.85	767,684.19	3.00
Michigan	104,378,390.00	2,721,944.20	2.61
Rhode Island ..	16,241,809.18	329,275.61	2.03
Massachusetts ..	109,857,344.01	1,169,160.60	1.06
New Jersey	69,920,079.55	652,776.46	.94
New York	506,593,933.70	4,752,254.59	.94
Pennsylvania ...	198,270,944.16	1,839,913.83	.93
Connecticut ...	26,901,779.90	201,668.36	.75
Total	\$1,812,383,342.23	\$92,575,834.30	

¹⁹ Penna. State Chamber of Commerce Address, delivered at Harrisburg, Oct. 15, 1925.

three States *not one gets back as much as one per cent* of the amount it pays the Government either in income taxes or in total Federal taxes? . . .

“The total income taxes paid by all forty-eight States is \$1,812,383,342. Of that amount . . . twenty States pay \$1,564,298,652, or over 86 per cent. The remaining twenty-eight States pay \$248,084,690, or 13 per cent. Yet of the twenty States which together pay *over 86 per cent* of these income taxes, not one gets back in Federal Aid *as much as ten per cent* of what it pays; but of the twenty-eight States which together pay *only 13 per cent* of these income taxes, one gets back in Federal Aid *317 per cent* of what it pays; two get back nearly *200 per cent*; three from 75 to almost 89 per cent; one over 66 per cent; two nearly 50 per cent; two from 32 to almost 37 per cent; four from 21 to almost 25 per cent; five nearly 20 per cent; three over 16 per cent; and five from 10 to almost 14 per cent.

“Is there any possible rational basis,” queries the Governor, “to justify such discriminations?” He then proceeds to set up with exemplary thoroughness a number of straw men for the purpose of bowling them over, and finally concludes that “no argument can be made” for such a system “except that the States which other States carry want the money.”¹¹ Here, then, is the secret of the East’s recent adherence to the states’ rights school. It be-

¹¹ Harrisburg Address.

lieves that under the subsidy system it is losing money.

Governor Ritchie's argument is quite plausible. At a cursory glance it seems to demonstrate satisfactorily the economic unsoundness of the federal aid principle. A more searching scrutiny, however, reveals serious flaws in the reasoning. In fact, the entire argument is based upon two assumptions, both of which are false. These assumptions are:

1. That federal income tax statistics furnish a satisfactory indication of the extent to which the citizens of each state contribute to the support of the federal government. Governor Ritchie definitely states in his Harrisburg address: "Income taxes reflect each State's contribution to the federal revenues upon a uniform and comparable basis."

2. That federal subsidies ought to be distributed among the states in proportion as their citizens contribute to the support of the federal government. According to the Governor, his figures "reflect the indefensible discriminations of the fifty-fifty system."

Each assumption deserves separate consideration.

As to the first, it is clear that federal income tax payments have little or no relation to the burden of federal taxation borne by the citizens of each state. Large income taxes paid by individuals represent earnings collected from many states. The income tax paid by practically every large corporation is

based upon revenues it has derived from every section of the country. Each corporation makes its income tax payment, however, in but one state—the state in which its main office happens to be situated. The United States Steel Corporation, for example, each year pays a federal income tax of several million dollars in New York State, though but two of its one hundred and forty-five plants and warehouses are in New York and only twenty per cent of its stockholders reside in the Empire State. (Twenty-six per cent of its stockholders are residents of Pennsylvania.) The Union and Southern Pacific Railroads, without a mile of track east of the Mississippi River, also pay their income taxes in New York State. So does the Anaconda Copper Mining Company, with its plants in Montana and Wyoming. The entire income tax paid by the Southern Railway Company is credited to Maryland, though not a mile of its tracks is in that state. Each year the income taxes paid in Michigan represent in large measure the profits on motor cars sold in every section of the country. These instances, which might be multiplied almost indefinitely,¹² lend force to the statement made by the United States Treasury Department in connection with its publication of “Statistics of Income.”¹³

“The amounts do not represent, however, what

¹² Cf. “Who Pays Uncle Sam’s Bills?” “American Highways,” Oct., 1925.

¹³ 1922, p. 30.

may be called the geographical distribution of income. The figures are compiled from the returns filed in each State. An individual files his income tax return in the collection district in which his legal residence or principal place of business is located, and a corporation files its income tax return in the collection district in which its principal place of business or the principal office or agency is located. Consequently, income reported by an individual or corporation in one State may have been derived from sources in other States. *From the foregoing it will be clear that there is no way of ascertaining from the income tax returns the amount of income earned in the respective States or the amount of tax paid on that basis.*"¹⁴

Since income tax returns furnish no adequate basis for determining the incidence of federal taxation, is it possible to ascertain in any other way the share of the federal tax burden borne by the inhabitants of each state? The wealth of each state should furnish a rough criterion, for it may be presumed that under any equitable system of taxation a rather close relationship exists between wealth and tax payments. A still better basis should be each state's current income, for income is generally regarded as the most satisfactory test of ability to pay. Fortunately, quite accurate recent estimates have been made of the wealth and current income of the sev-

¹⁴ Italics supplied by the author.

eral states. The wealth estimate is that of the United States Census Bureau, presented in "Estimated National Wealth,"¹⁵ and based on 1922 figures. For income statistics reliance must be placed upon the estimate of a private agency, the National Bureau of Economic Research.¹⁶ Its figures are admittedly an estimate, but they have been prepared with such care as to deserve considerable respect.

Whether we compare the amounts paid to each state in the form of federal aid with the amount of each state's wealth or of its current income, the results are approximately the same. In either case Governor Ritchie's figures lose much of their significance. A glance at his table, given on page 244, shows that on the basis of his calculations Connecticut, Pennsylvania and New York are the principal sufferers, while Nevada and the Dakotas gain the most. In fact, if an average figure is taken for each of these two groups of states, the Western trio are being treated two hundred and forty-four times as well as the three Eastern states. When a different method of computation is used, however, and total wealth or current income is substituted for income tax payments, the result is very different. Considering the same two groups of states, Nevada and the Dakotas are still the gainers, but instead of re-

¹⁵ A part of the Decennial Report on Wealth, Public Debt, and Taxation, 1922.

¹⁶ Leven, Maurice: "Income in the United States," National Bureau of Economic Research, N. Y., 1925.

ceiving from the federal treasury two hundred and forty-four times as much proportionately as Connecticut, Pennsylvania and New York, they receive only ten times as much. Other figures of the Ritchie table may be similarly pared. The opponents of federal aid may reply that any system which permits some states to obtain from the federal government ten times as large subsidies as other states in proportion to their wealth or income is inequitable. But under any circumstances it is clear that the preferential treatment accorded the poorer states has been grossly exaggerated.

The second assumption of the distinguished Governor of Maryland remains to be considered. This assumption is that federal subsidies ought to be distributed among the states in proportion as their citizens contribute to the support of the federal government. But why should they be apportioned on any such basis? The opponents of federal aid do not tell us. They merely cite figures which in their opinion "reflect the indefensible discriminations of the fifty-fifty system." They take for granted that the states should benefit from federal taxation in proportion to their wealth. This, certainly, is not the generally accepted view. No such theory has been adopted by the states. Practically all state fiscal systems result in a transference of wealth from the richer to the poorer counties. New York City, for example, pays into the state treasury every year

more than twice the total of the various funds allocated to it. In plain language, it is helping to pay the cost of government for counties less able to bear the burden of taxation. So is practically every other large city.¹⁷ Apportionment of federal services on the basis of wealth has never been given serious consideration. Federal post offices and federal courts are scattered throughout the country according to need, or at least according to Congressional concepts of need. In all probability not a single member of Congress could be induced to support the proposition that federal services should be apportioned on the basis of wealth—that his district, for example, should have four times as many postmen as some other district, because his constituents were four times as rich. Yet many members of Congress freely advance the theory that federal subsidies, to be used in purchasing services, should be apportioned according to wealth, and not according to need. Ability to pay, whether we regard wealth or income as evidence of that ability, should be used as the basis of taxation, but not as the test of services to be rendered. We expect the rich man to pay for the public school system in proportion to his ability to pay, even though he be childless, or though he send his children to private school. But the public schools are open to rich and poor alike. There is scarcely a function of government that does not result in the

¹⁷ Cf. recent annual reports of the New York State Tax Commission.

transference of wealth, for wealth and need are seldom if ever synonymous. If need is the proper basis for apportioning the services of government within the states, why stop at state lines? "The Government did not stop at state lines when it called the four and a half million boys to the colors in the World War, but it went to the poor sections along with the rich and drafted the poor boy just as it did the rich. . . . If the Government has the right to call . . . all the boys of all the states, rich and poor alike, to the colors to defend the lives and property of the richer sections, along with the poor, and train them to fight for their country, and finally land them in some National cemetery to be eulogized on May thirtieth and November eleventh, the Government would be heartless indeed if it refused those same boys equal opportunity for training to fit them to carry on in time of peace."¹⁸

An argument frequently advanced by the opponents of federal aid is that it is being used by the federal government to acquire a measure of control over purely local functions—matters not of sufficient importance to the nation to warrant national supervision. "From a governmental point of view, the unsoundness of the fifty-fifty system lies principally in the fact that it applies to purposes which

¹⁸ "Vocational Education and the Need for Federal Aid," address of E. T. Franks, member of the staff of the Federal Board for Vocational Education, delivered before the State Teachers' Association of Pennsylvania, Scranton, Pa., Dec. 29, 1925.

are inherently local in their nature," declared Governor Ritchie in his Harrisburg address. "The federal government should appropriate only for interests which are purely of national concern," said former Governor Lowden,¹⁹ this statement being intended as a prelude to a demonstration that few if any federal aid projects bore any relation to the national welfare.

The statement of the general principle that the federal government should concern itself only with matters of national importance is easy. The practical application of any such principle is virtually impossible. For no one has yet furnished a satisfactory definition of "matters of national importance." How is one to recognize an affair of national interest? What are the distinguishing characteristics of a purely local function? Is the construction of highways a national or a local matter? How shall education be classed? What is to be done with public health?

The opponents of federal aid insist that the functions for which it is granted are purely local in their scope; the friends of the subsidy system contend that these functions are matters of national interest. They forget that no function of government is inherently national or inherently local. The concept of a function as national or local varies with time and place. Highway construction may properly have

¹⁹ Convocation address, University of Chicago, June, 1921.

been a local obligation only three decades ago; the advent of the automobile may have transformed it overnight into a matter of national concern. Public health may properly be a national function in the United States and a local function in another country, because of widely varying conditions.

The entire discussion of national *versus* local matters is totally irrelevant. Nothing is to be gained by establishing a principle that is impossible of application. The advisability of granting federal aid for highways is not dependent upon whether highways are essentially local or essentially national, but upon whether better roads can be and have been built with federal aid than without it. The wisdom of subsidizing vocational education must be determined in view of past and probable future accomplishments. Every subsidy must meet the practical test of results. If it meets that test, little consideration need be given to metaphysical distinctions concerning local and national functions.

An argument frequently advanced by the opponents of federal aid is that the system stifles local initiative, and results in an abandonment of local responsibility. An editorial in *World's Work*,²⁰ entitled "Abolishing the Fifty-Fifty System," declares that "the system tends to impair state initiative and incentive." Such a statement is capable of only two possible interpretations. The charitable

²⁰ August, 1925.

view is that it was penned by one unfamiliar with the subsidy system. Uncharitable critics may regard it as a brazen attempt to misrepresent the facts. In any event, it is entirely without foundation. State and county funds for extension work, vocational education, highways—in fact, for every line of activity subsidized by the federal government—have multiplied several fold as a direct result of the stimulus of federal funds. Federal aid is often referred to as the “fifty-fifty” system, but it might more accurately be called the “eighty-twenty” or “ninety-ten” system. Most of the money is coming from local sources. The people in their local communities are testifying to their interest most concretely by more than matching federal funds. Often federal funds are matched several times over. State and local expenditures for agricultural extension work are nearly twice as large as the federal subsidy. For forest fire prevention state and local funds are three times as large as the federal grant. Every subsidy except that for the National Guard is exceeded by local appropriations, and most of those local appropriations would never have been made, in the judgment of state officials, without the stimulus of federal funds. The administration of all these appropriations, federal and state alike, is in the hands of state authorities. They are directly responsible for the framing and execution of state policies. How, then, is it possible to justify the assertion that local initia-

tive is being stifled? When the records show four or five states with satisfactory, well developed programs of civilian rehabilitation or child hygiene in 1918 or 1920, and forty or forty-five with such programs in 1927, controlled by state authorities and largely supported by state funds, it is difficult to believe that local responsibility is being shirked, and that the people are sitting back in complacent indifference.

Though the subsidy system has been so devised as to retain most of the authority over state programs in the hands of state officials, it has naturally resulted in an expansion of federal power. Federal bureau chiefs now possess a veto over numerous state activities. It is not surprising, therefore, that long before federal aid developed to its present proportions many of its foes contended that it was unconstitutional. They pointed out that it was transferring to the federal government authority over matters not mentioned in the Constitution, and therefore reserved to the states. In the spring of 1922 the Attorney General of Massachusetts gave an opinion that the Sheppard-Towner Act was unconstitutional, and shortly afterward two cases were brought to test its constitutionality. A taxpayer's suit was brought by one Harriet A. Frothingham, a resident of the State of Massachusetts, to restrain the Secretary of the Treasury from making payments to the states under the provisions of the Ma-

ternity Act on the ground that the federal statute unreasonably increased her tax burden, thereby depriving her of her property without due process of law. This case was carried to the Supreme Court of the United States, where it was joined to an original suit by the State of Massachusetts. The State's contentions were:

1. That the act constituted an effective means of inducing the states to yield a portion of their sovereign rights.

2. That the burden of the appropriations provided by the statute rested largely and unfairly upon the industrial states.

3. That the effect of the law was to impose upon each state the "illegal and unconstitutional option either to yield to the Federal Government a part of its reserved rights or lose the share which it would otherwise be entitled to receive of the moneys appropriated."

On June fourth, 1923, the Supreme Court rendered its decision. The two cases were dismissed for want of jurisdiction. "In the last analysis," said the Court, "the complaint of the plaintiff State is brought to the naked contention that Congress has usurped the reserved powers of the several States by the mere enactment of the statute, though nothing has been done and nothing is to be done without their consent; and it is plain that the question, as it is thus presented, is political and not judicial in

character, and therefore is not a matter which admits of the exercise of the judicial power."

This assertion was a sufficient answer to the objections of the plaintiffs. The continuance of the subsidy system, the Court pointed out, was a question of advisability and not of constitutionality, and therefore was within the purview of Congress instead of the judiciary. But the Court did not rest content with this disposition of the matter. Instead, it went on to make a number of observations which, though in the nature of *obiter dicta*, are highly illuminating. Speaking through Mr. Justice Sutherland it said: "Probably it would be sufficient to point out that the powers of the States are not invaded, since the statute imposes no obligation, but simply extends an option which the State is free to accept or reject. But we do not rest here. . . . What burden is imposed upon the States, unequally or otherwise? Certainly there is none, unless it be the burden of taxation, and that falls upon their inhabitants, who are within the taxing power of Congress as well as that of the State where they reside. Nor does the statute require the States to do or yield anything. If Congress enacted it with the ulterior purpose of tempting them to yield, that purpose may be effectively frustrated by the simple expedient of not yielding."

The Court disposed of the Frothingham suit in the following words: "The administration of any stat-

ute, likely to produce additional taxation to be imposed upon a vast number of taxpayers, . . . is essentially a matter of public and not of individual concern. If one taxpayer may champion and litigate such a cause, then every other taxpayer may do the same, not only in respect of the statute here under review but also in respect of every other appropriation act and statute whose administration requires the outlay of public money.”²¹

This language is so clear and direct that further objection to federal aid on the ground of unconstitutionality would seem virtually impossible. Many opponents of the system, however, ignore the Supreme Court's decision, and still prate of unconstitutionality. In the fall of 1925, two years after the Massachusetts and Frothingham cases had been decided, Governor Ritchie declared: “It simply cannot be argued that the Federal Government has any right to use Federal funds as a means of acquiring a control over local State purposes, which under the Constitution is not granted to the Government but is reserved to the States. That, under our present Constitution, is simply indefensible.”²²

An argument frequently advanced in opposition to the subsidy system is that it furnishes federal officials with an excuse to dominate state activities and to force federal policies upon the states. The

²¹ *Massachusetts v. Mellon* and *Frothingham v. Mellon*, 262 U. S. 447.

²² Harrisburg Address.

evidence showing this charge to be groundless has been presented in such detail throughout this volume that further discussion is scarcely necessary. It should be sufficient to point out that:

1. The "domination" consists of a three- or four-day visit once a year by some federal official to each state, supplemented by a searching scrutiny of the state's accounts and a careful examination of the plan it has submitted.

2. The work is planned and carried out in each state by its own officials. The veto power possessed by the federal supervising bureaus is seldom used. There is some reason for believing that a more frequent exercise of this federal power would be beneficial.

3. The state officials administering the various subsidy laws agree almost unanimously that there is no federal domination. They speak instead of federal co-operation, and describe it as kindly and helpful. Many state directors have already been quoted, but the testimony of one more is pertinent at this point. "I have been a state director of extension work since 1915," he declared in 1925. "During that time no officer of the federal government has attempted to dictate plans, policies, or programs. No plan or project which I have desired to adopt in the conduct of co-operative extension work has been rejected or disapproved by the federal government. Suggestions for improvement have been made from

time to time, and on the whole these have been constructive. Those that seemed good have been adopted, and most of them have proved to be good in practice. Others have not been adopted, but there has never been any pressure exerted to have them adopted, nor has there been as a result any lack of good feeling or co-operation."

Federal aid is sometimes criticised on the ground that it tends to produce standardization. This charge is made in the *World's Work* editorial already cited.²³ Presumably the standardization objected to is unreasonable or unnecessary standardization, for a certain amount of uniformity is not only desirable but absolutely essential. Every section of this country has its own distinct needs, but it also has a vast number of needs in common with every other section. The differences are less striking than the similarities. The essential soundness of the subsidy principle lies in the fact that it makes possible basic standardization and yet permits the adoption of any number of varying practices. Highway construction must conform to recognized engineering standards if it is to receive federal funds; that is basic. But the types of roads, their location, their width, the materials used, may all vary with local conditions. Programs of vocational education must make provision for minimum standards of equipment and instruction; that is fundamental.

²³ August, 1925.

But the subjects taught, the place and manner of their presentation, differ widely from state to state. Due recognition of sectional differences is assured by permitting each state through its own officials to formulate its own plan; a reasonable and necessary degree of standardization should be obtained by means of the federal veto. Federal officials have sometimes failed to secure sufficient uniformity because of their hesitancy to use their power of veto, but state officials have guarded their divergent local practices with zealous care. If a reasonable balance has not been struck between local and national needs, it is because the national welfare has been sacrificed to local whims.

The case for federal aid stands on five grounds:

1. It stimulates state interest and state activity.
2. It brings about a certain degree of uniformity without ignoring differences in local needs.
3. It raises local standards and establishes a national minimum of efficiency.
4. It equalizes to some extent the tax burdens of the several states.
5. It recognizes and re-affirms the principle of local autonomy.

Each of these five points must be given separate consideration.

Federal aid stimulates state interest and state activity. As pointed out by Dr. Samuel P. Capen,

Chancellor of the University of Buffalo, an avowed opponent of the subsidy system: "It is obvious that the new type of Federal law brings action without delay. It buys action. No such country-wide development of agricultural extension or vocational education could possibly have been induced in this brief period without the combined pressure of Federal subsidies and Federal authority."²⁴

Federal aid brings about a certain degree of uniformity without ignoring differences in local needs. There is a greater tendency toward uniformity in vocational education than is found in the field of general education. Standard agricultural practices are receiving general recognition in every section of the country through the efforts of the county agents. The Bureau of Public Roads has brought about the almost universal adoption of proper methods of highway construction. But there has been no excessive standardization, with its deadening effect upon local initiative, because the programs of work under every subsidy law have been formulated and carried out by state officials, and have varied with every change in local needs.

Federal aid raises local standards and establishes a national minimum of efficiency. Better equipment in vocational schools, better teachers for vocational pupils, better equipment and training for members of the National Guard, better methods of forest fire

²⁴ University of Illinois Bulletin, vol. XIX, no. 23, Feb. 6, 1922.

prevention and highway construction, better farms, better rural homes—these are but a few of the things that have come about as a direct consequence of the subsidy system. Most of the co-operating state officials welcome federal aid, because they know that without the stimulus of federal funds and the support of the federal government they would be unable to secure satisfactory results. Some of the more progressive states have established standards considerably higher than the federal minimum, but in most states improved standards are directly traceable to the influence of the federal government.

Federal aid equalizes to some extent the tax burdens of the several states. The states vary widely in their ability to support the various functions of government. The per capita wealth of New York State is nearly three times as great as that of Alabama, and the per capita income figures reveal equally as striking a difference between the two states. Pennsylvania is more than twice as prosperous as South Carolina, whether wealth or current income be taken as the index of prosperity.²⁵ Statistics such as these indicate a difference in the ability of the several states to support the various functions of government, but they do not indicate the extent of that difference. The fact that New York

²⁵ "Estimated National Wealth," from the Decennial Report on Wealth, Public Debt, and Taxation, 1907; Lewis, Morrison. "Income in the United States," National Bureau of Economic Research, New York, 1925.

is three times as wealthy as Alabama suggests that the Empire State is better able to pay for its highways; but who can say whether its superior ability is two, three, or four times as great? A vast number of factors must first be considered—the comparative highway needs of the two states, comparative construction costs, comparative administrative efficiency, the demands made upon the people of each state for other governmental functions. In the field of education an attempt has been made to appraise with reasonable accuracy the ability of each state to support an efficient public school system. This study, published as a bulletin of the National Education Association,²⁶ concludes that the twelve richest states of the Union are, on the average, three times as able to meet their educational obligations as the twelve poorest states—in other words, that the twelve poorest states, in order to provide school facilities for their children equal to the facilities offered by the wealthier commonwealths, must impose upon their people a tax rate three times as high. Such a rate would be virtually confiscatory. The weakness of this study is that it ignores other governmental activities and treats of education as the one function of government. The people of the richer states, in all probability, would be three times as able as their less fortunate neighbors to pay for education if no

²⁶ Norton, John K., "The Ability of the States to Support Education."

other demand were made upon their pocketbooks. But the people of all states must also pay for charities, for highways, for police and fire protection, for public health, for numberless other functions of government. So that in the final analysis the ability of the richer states to support education may be two times, three times or a dozen times as great. That it is greater can scarcely be doubted.

The subsidy system equalizes to some extent the tax burdens of the several states by taking from the federal treasury funds that presumably have been collected on the basis of wealth or income, and apportioning them on the basis of population.²⁷ Population, therefore, is made the gage of each state's need. It is a very crude measuring stick. It takes no account of wealth, income, existing facilities, density of population or a dozen other equally important factors. But it ought not to be abandoned unless a better measuring stick can be found. Whether the ability of each state to support each function of government can ever be determined with accuracy is an open question. Some day a satisfactory gage may be devised. But in the meantime population serves as a reasonably satisfactory basis of apportionment, since it is uniform, easily determined, and not subject to political manipulations.

²⁷ This statement is not strictly accurate. Clarke McNary funds are distributed on the basis of cost of protection of forest lands from fire, and population is but one of three bases used in determining the allocation of federal aid for highways. Generally speaking, however, population is the accepted basis of apportionment.

Federal aid recognizes and re-affirms the principle of local autonomy. One of the most striking features of the subsidy system is its emphasis upon local problems and local needs. Each state plan is formulated by its own officials. Each state plan is designed to meet peculiar local conditions. Each state plan is carried out by state authorities. The importance of these facts must not be overlooked. But neither must the significance of the federal government's rôle be minimized. Federal bureau chiefs have stimulated state interest and raised state standards with infinite tact and skill. Yet within the last few years a dangerous decentralizing tendency has manifested itself in the form of numerous suggestions and proposals for federal aid to the states without the steadying influence of federal supervision. In December, 1921, when David Kinley was installed as President of the University of Illinois, he said in part: "If Federal aid is to be given to the States for education or research, it should be on the principle of the first Federal grants for the Land Grant Colleges and of the Second Morrill Act. That is to say, appropriations should be made direct to the States, to be distributed by their legislatures, and to these should be left the mode of distribution. . . . There should be no more of the practice of the wealthy private donor, of giving a dollar provided it is matched by another."²⁸

²⁸ University of Illinois Bulletin, vol. XIX, no. 23, Feb. 6, 1922.

Several months previously a bill had been introduced in Congress authorizing the distribution among the states of one hundred million dollars of federal funds for the promotion of education. This proposed bit of legislation, popularly known as the Towner-Sterling Bill, contained the provision that “all the educational facilities encouraged by the provisions of this Act and accepted by a State shall be organized, supervised, and administered exclusively by the legally constituted State and local educational authorities of said States, and the Secretary of Education²⁹ shall exercise no authority in relation thereto; and this Act shall not be construed to imply Federal control of education within the States, nor to impair the freedom of the States in the conduct and management of their respective school systems.”³⁰

In other words, the federal government was to give away unconditionally one hundred millions of dollars to the states, without reserving even the right of protest should the recipients squander their allotments as they squandered other grants similarly given in the early years of the nineteenth century. The bill as originally introduced was defeated, and seems to have fared but little better in subsequent Congresses. It has since been shorn of its subsidy feature, and is now simply a proposal to establish

²⁹ An officer whose post was to have been created by the terms of the bill.

³⁰ H. R. 7, 67th Cong., 1st Sess.

a federal Department of Education. Should federal aid for general education again receive the serious consideration of Congress, adequate safeguards should be provided against the abuse of federal funds. The passage of the original Towner-Sterling Bill would have marked a reactionary tendency in American administration, for the expenditure of federal moneys cannot safely be entrusted to state and local officials without some degree of federal supervision.

The conclusions reached as a result of this study have already been presented in various parts of this volume, but for the sake of clarity and emphasis they may be summarized as follows:

1. Federal aid has stimulated state interest and state activity.

2. It has raised state standards and established a national minimum of efficiency.

3. It has produced a certain degree of standardization.

4. It has made possible, however, the continued recognition of local needs.

5. It has not resulted in attempted federal domination. There has been no unreasonable federal interference with state policies or with the details of state administration.

6. It has equalized to some extent the tax burdens of the several states. The equalizing process has

been somewhat haphazard, but has proved reasonably satisfactory.

7. It has not succeeded in eliminating state politics.

8. It has tended, however, to reduce the amount of state politics, and has increased greatly the efficiency of state workers originally selected for political reasons.

9. The federal bureaus administering the subsidy laws are free from politics.

10. The thoroughness of federal supervision varies greatly from bureau to bureau. Some bureaus supervise very carefully; others make little more than nominal inspections. More thorough supervision by some bureaus would greatly increase their effectiveness.

11. Practically every subsidy law contains defects which should be corrected at once. While they are permitted to continue, the country will fail to receive the full benefits of the federal aid principle.

12. Federal aid should be continued for those purposes for which it is now granted.

13. It should also be granted for other governmental activities generally conceded to be of sufficient importance. Any attempt to classify functions as national or local is unnecessary and virtually impossible.

14. Every subsidy law should make provision for adequate federal inspection of state activities.

15. Most of the appropriations to the federal bureaus for administrative purposes are inadequate, and should be increased.

In so far as these conclusions are accurate, they indicate that federal aid makes possible the establishment of a national minimum of efficiency and economy without the sacrifice of state autonomy. They show that the subsidy system has become an established and essential part of American federal administration.

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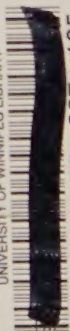
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